Scientific Weight Control

"WEIGH YOURSELF DAILY"

SCIENTIFIC WEIGHT CONTROL

AN IMPROVED SYSTEM FOR

REDUCING OR INCREASING WEIGHT

together with an explanation of the benefits
to be gained from weighing daily

EDITED BY

JAMES M. BOOHER, M. D.

MEDICAL DIRECTOR
CONTINENTAL SCALE WORKS

Formerly
Surgeon, Carnegie Steel Co.
Director Child Welfare, Chicago West Park Commission
Mine Surgeon, United States Bureau of Mines

CONTINENTAL SCALE WORKS
CHICAGO

COPYRIGHT 1925

PRINTED IN U. S. A.

CONTENTS

FOREWORD The relation of health to weight. The benefits from weighing daily. The psychological relation between daily weighing and weight control.

CHAPTER I The importance of your Efficiency Weight. Table showing what you should weigh. Danger of overweight and underweight.

CHAPTER II Facts you should know about reducing. The danger of drugs and too rapid reduction. Precautions that should be taken. Fad diets and methods.

CHAPTER III Theory of weight reduction. A discussion of the different kinds of food and their place in the reduction diet.

CHAPTER IV The element content of foods. The ration of alkalin to acid forming foods necessary to health.

CHAPTER V Foods essential to life. Value of fruits, cereals, soups, salads, in reducing or gaining weight.

CHAPTER VI The physiology of digestion. The harm of drinking water with meals. Value of coffee and tea. The rule to guide the amount you eat.

CHAPTER VII Determining your food requirements or "calory intake." Tables showing calories in average serving of common foods. Sample reducing menus. Maintenance tables showing number of calories in daily diet. Food friends of the fat. Afternoon tea risks.

CHAPTER VIII Why exercise reduces weight. Value of exercise.

CHAPTER IX Taking off weight in spots. Symmetry table of measurements. Exercises for reducing spots. For slender hips and thighs. To reduce your waist and abdomen. For a shapely leg and ankle. To take off fat back of the neck. Removing a double chin.

CHAPTER X Building up weight. Method of putting on weight. Proper foods and exercises. Foods you should eat.

CHAPTER XI Your correct weight once regained should be maintained.

CHAPTER XII Protecting your children's health by regular weighing. Their correct weight in relation to sex, age, height.

APPENDIX
Reference Tables.
Eddy's Vitamin Tables.
General Menus.
Exercises.

FOREWORD

The united recommendations of the medical profession to "watch your weight daily" are the result of the rapidly growing recognition of the vital relationship between weight and health. Scientific research has proved that weight is an accurate index of present and future health.

Your present weight will tell your doctor if you are in the best of health. It will reveal whether you are discharging your daily responsibilities with the maximum efficiency of which you are capable. It will tell him if you are eating too much or too little, and whether or not you are eating the right combination of foods.

Were you to report your daily weight to him, he would be in a position to detect the start of certain symptoms which if unchecked would result in sickness.

The presence of scales in practically every physician's office is a visible symbol of the importance that the medical profession places upon personal weight. As a basis for most diagnoses, most doctors require the patient's weight. From infancy on, doctors place emphasis on weighing. Baby specialists insist on learning their tiny patient's daily weight to the ¼ ounce. School authorities weigh the pupils regularly, in many cities, to discover any evidence of malnutrition.

Were you to consult your physician on the advisability of weighing daily, he would urge you to do so. Weigh daily is a health habit whose value cannot be over-estimated. Just as a knowledge of his patient's weight enables the physician to better protect his patient and hasten his recovery, a knowledge of your daily weight and an understanding of the significance of its variations will make it possible for you to protect your health, enhance your efficiency, keep fit, and reduce the necessity of having a doctor to the minimum.

Look on Your Health-O-Meter as a Health Machine

It is only when the Health-O-Meter is placed against a background of potential benefits that it assumes its rightful proportions. A Health-O-Meter when fully used does infinitely more than give an ultra-modern touch to the

bathroom and satisfy that inborn curiosity to know one's daily weight. Properly used, a Health-O-Meter is also a health-builder, health-protector and a health-barometer. It can serve every member of the family.

So that you may receive the utmost benefit from a Health-O-Meter, we urge this program—

I. Consult the Weight Tables in the first chapter. Ascertain your correct weight. If you are within 7% of it, let well enough alone. Simply weigh daily to be sure that your weight is keeping within this safety zone.

II. If you are more than 7% over or under your correct weight, follow the Weight Control System outlined for taking off or putting on weight.

III. After regaining your correct weight, weigh daily to see that you are maintaining it. Keeping your weight right contributes to efficiency.

IV. If your Health-O-Meter shows you are losing weight or gaining weight, and you cannot find the reason, consult your physician.

V. Weigh your children on the Health-O-Meter. Compare their weights with their proper weights as shown on Page 86. If they are over or under their normal weight, you can rest assured that there is something wrong with them physically or with their diet.

The Secret of Weight Control

A famous doctor once said that if people would only *watch their weight every* day they need never worry about getting too stout or too thin. That is quite true. *Knowing your weight acts on you mentally.*

The knowledge that you are putting on weight subconsciously acts as a deterrent. If the morning report from the Health-O-Meter shows that you are two pounds heavier than last week, at luncheon you eat less, and dinner finds you denying yourself a second helping. It is surprising how a very slight denial or a change in diet will affect your weight. It is not at all unusual for a person to give up a single item of food and lose as much as a half pound a day.

Weighing daily will warn you of a tendency towards overweight in time. A daily gain of a half pound is not noticeable until you find your clothes getting too tight. When you wait until then, and fat gets into your system, your task of reducing is difficult. It is easy to take off a few extra pounds when you are first getting stout. The longer you allow yourself to flesh up, the harder it will be to remove the superfluous flesh.

An unwilling eye may ignore a growing tendency to plumpness; a Health-O-Meter will brutally tell the truth. Weighing daily on a Health-O-Meter answers the question, "Am I gaining or losing weight?" By knowing the truth in time, when taking precautions is easy, you can avoid reaching that

condition where you must follow a definite program to regain your proper weight.

The first step towards weight control is weighing yourself daily without clothes. This requirement obviously makes a public weighing machine impossible. Clothes make a big difference. Average clothing weighs from five to ten pounds according to the season. Even the lightweight clothing worn by women today varies considerably in weight. Few public scales ever agree in weight. For them to differ two to five pounds is not unusual.

In weighing yourself for health, accuracy—infallible and unvarying accuracy—is absolutely essential.

With a Health-O-Meter Automatic Bathroom Scale, securing your REAL weight is easy. After your morning bath, when you have thoroughly dried yourself with a vigorous toweling, step on the scales without clothes and see what you weigh—and govern yourself accordingly.

Make this a daily practice. Combine it with the simple suggestions contained in this book. You will be delighted at the difference. You will find yourself enjoying your meals more. You will sleep like a child without waking or tossing with bad dreams. You will work with greater enjoyment and play with increased zest. Your senses will respond with new avidity to the satisfactions of life. Why? Because you will be physically fit, each organ functioning perfectly, your weight right. Your body will be receiving the nourishment it requires. No undue tax will be placed upon your digestive apparatus. Energy, belonging to your brain, will not be diverted to help out an overloaded stomach. You will look your best, feel your best, and work your best. Is it any wonder that you will more keenly and thoroughly appreciate the pleasures of life?

Chapter I

The Importance of Your Efficiency Weight. Is Your Weight Right Now?

Do you weigh what you should today? Examine the Weight Tables! Most men and women are overweight or underweight. Each condition points to an unpleasant though different destination.

Science has proved that health and a youthful appearance are woven into maintaining the right weight. The length of your life, the condition of your health, the degree of efficiency which you display in your daily work are largely influenced by your weight.

Overweight and underweight are responsible for the majority of the rejections for life insurance. From costly experience, life insurance companies have found that there is a 33⅓% greater death rate among the 20% overweight, a 50% greater mortality among the 40% overweight than among those of normal weight.

Correct Weight . . . . the foundation of feeling fit

If you are to feel your best, look your best, work your best, your weight must be right. Physiologists have found there is one weight at which a man feels best, works best, functions best, and is most resistant to disease.

This Efficiency Weight, varying with every man and woman according to age and height, is the one that should be ascertained, then attained and persistently maintained.

Maintaining your Efficiency Weight means more than keeping your weight at a certain figure. It means you are eating the right amount and kind of food, getting enough sleep, exercising sufficiently, taking the right care of yourself.

Learn your Efficiency Weight now! The Weight Tables that follow give your Efficiency Weight. They are accepted by medical authorities and life insurance companies as giving the ideal weights for men and women.

In rare cases, the weight given should be modified by the factor of heredity. If you come from a race of short, stocky, heavy-boned men, your

Efficiency Weight should be greater than that of the average man of your age and height.

If you think the Efficiency Weight given for you should be modified, consult your physician.

What is your Efficiency Weight according to the table below? Are you over or underweight?

Tables of Efficiency Weights

FOR MEN

Height	19 yrs.	20	21 22	23 24	25 29	30 34	35 39	40 44	45 49	50 over
5' 3"	129	130	132	133	135	135	133	131	129	128
5' 4"	133	134	136	137	139	139	137	135	133	132
5' 5"	137	138	140	141	143	143	141	139	137	135
5' 6"	141	142	144	145	147	147	145	143	141	139
5' 7"	145	146	148	148	151	151	149	147	145	143
5' 8"	150	151	153	154	156	156	154	152	150	148
5' 9"	155	156	158	159	161	161	159	157	155	153
5' 10"	160	161	163	164	166	166	164	162	150	158
5' 11"	166	167	169	170	172	172	170	168	165	163
6' 0"	172	173	175	176	178	178	176	174	172	169
6' 1"	178	179	181	182	184	182	179	177	177	175
6' 2"	184	186	188	189	190	190	187	184	182	181
6' 3"	190	192	194	195	197	197	194	191	189	187

FOR WOMEN

Height	19 yrs.	20	21 22	23 24	25 29	30 34	35 39	40 44	45 49	50 over
5' 0"	114	115	115	116	117	120	119	118	117	116
5' 1"	116	117	117	118	119	122	121	120	119	118
5' 2"	119	120	120	121	122	125	124	123	122	121
5' 3"	122	123	123	124	125	128	127	126	125	124
5' 4"	125	126	127	128	129	131	130	129	128	127
5' 5"	129	130	131	132	133	135	134	133	132	131
5' 6"	133	134	135	136	137	139	138	137	136	135
5' 7"	137	138	139	140	141	143	142	141	140	139
5' 8"	141	142	143	144	145	147	146	145	144	143
5' 9"	145	146	147	148	149	151	150	147	148	147
5' 10"	149	150	151	152	153	155	154	153	152	151
5' 11"	153	154	155	156	157	159	158	157	156	155
6' 0"	158	159	160	161	162	164	163	162	161	160

If your "bathside" weight is within 7%, either way, of your Efficiency Weight, do not attempt to take off or put on weight. As long as your weight keeps within the 7% safety zone, as shown on the chart, you have no need to worry.

For example: If your correct weight is 150 pounds and your "bathside" weight is somewhere between 140 and 160 pounds, let well enough alone.

On the other hand, if you are more than 7% over or under your right weight, get busy!

What is your Efficiency Weight? What is your actual weight? Is it within 7% of your Efficiency Weight? If it is, just keep on weighing daily to watch that it does not get out of that zone. If your weight is out of the safety zone, follow the suggestions in the succeeding chapters.

Overweight Dangerous

Over one-eighth of the adult population of this country is overweight. This condition is shortening the life, impairing the health, and lessening the efficiency of thousands.

The anxiety of the doctor to learn if his patient is overweight is because the doctor knows that overweight is the beginning of physical deterioration.

Anemia, gout, rheumatism, heart trouble, diabetes, kidney trouble, high blood pressure, hardening of the arteries usually start with overweight.

Overweight not only exacts a future penalty but cuts down a man's personal efficiency. Carrying a load of surplus fat, day in and day out, slows up a man physically, saps his vitality, shortens his persistence.

Overweight is particularly insidious in its effects because in the early stages sufferers from it will not admit its existence. They avoid weighing. They pretend not to notice their increasing girth. They ignore all the warning signs. Suddenly, they realize they are fat, usually when they are so overweight that regaining their normal weight is extremely difficult.

Underweight a Menace

Underweight, too, is a detriment, especially for younger men and women. Life insurance actuaries have found that underweight is more deadly than overweight to those under 30 years of age.

Underweight is a symptom usually. It indicates malnutrition, insomnia, nervousness, anemia, pus in some part of the body. Those underweight should go to their doctor and find out the reason.

No man or woman can maintain personal efficiency at its highest peak when he or she is underweight.

Chapter II

Facts You Should Know About Weight Reduction

At the very start we want to get across emphatically the fact that the Health-O-Meter Method is not designed to take off ten to twenty pounds in two weeks. Such a rate of reduction is murderous. The maximum that any man or woman should lose daily should not be over ½ pound a day.

Over-reduction exacts an inexorable penalty; maybe only in haggard cheeks, flabby flesh around the jaws, sagging tissues; maybe in ill health; maybe in a serious ailment.

Don't attempt to reduce unless you watch your weight daily. Only by weighing daily can you know positively that you are not reducing too rapidly.

Too rapid reduction is an impossibility if you follow the method outlined herein.

An Important Warning

One thing we urge—and we cannot urge it too strongly—*don't take drugs, pills, tablets, or any form of internal remedy,* save light purging should constipation develop at first while you are reducing weight by dieting. Internal remedies containing drugs are not safe. Many are positively dangerous. Health is too precious to risk by taking drugs not recommended by a physician. Some may tell you that they have taken drugs and lost weight without suffering any disastrous results. This may and may not be true. The injury may have been done and may not have manifested itself so far. And the drugs that will not hurt some may be poisonous to others. So be safe. *Avoid drugs, internal weight reducers, except under the advice of a physician.*

In this book you'll find the true, reliable, scientific methods of weight control. Study these and profit by this knowledge.

And when your weight has reached the desired figure, when you are back to normal, remember that the same excesses which caused you to grow too fat in the first place, or too thin, will result in the same condition again. Strive to be as moderate after you have regained your proper weight as you were when seeking to reduce. You will have a wider latitude, of course, because weight reduction or increased weight are no longer your

objectives. But *keep on weighing yourself, every day,* and if you find your weight increasing if you were too stout, or dropping down if you were too thin, go back to your method of weight control. You will soon regain the figure you desire.

Don't Reduce Too Quickly

Such a little thing as eliminating bread and butter at meal time, doing without cream or sugar in tea or coffee, or avoiding pastries and candies, has been known to show amazing results.

Many will say: "What good does it do me to take off half a pound when I am twenty-five pounds overweight?" Half a pound seems very little to take off if you want to reduce twenty-five pounds, but remember this— *half a pound a day means fifteen pounds a month,* more than half your overweight. And weight should never be reduced too fast or too violently. It is much safer to reduce thirty pounds in sixty days than fifteen pounds in ten days. The system has to readjust itself to the new physical condition created by reducing weight. Fat taken off too quickly creates haggard cheeks, pendulous flesh around the jaws, sagging tissues where the tissues should be firm and beautifully rounded.

Weight is not put on quickly. It is a slow accumulation. And to become slim and be perfectly healthy it is better to take it off slowly, gradually, so the system gets accustomed to the change.

The same holds true of building up weight. If you can build up weight, even as little as a quarter of a pound a day, you'll be stronger and better off than if you suddenly increase your weight by many pounds. Any doctor will confirm this statement and warn you against extreme methods.

For the above and many other reasons, a HEALTH-O-METER Automatic Bathroom Scale gives the necessary information about your changing weight to enable you to control your weight by controlling your eating. You will not gain or lose too fast. It will encourage you day by day, you can *see and know* your progress and feel strengthened in your determination to go ahead.

The Easy Way to Weight Control

For this purpose the HEALTH-O-METER Automatic Bathroom Scale is necessary. You keep it in your bathroom. It is small, compact, handsomely finished in white enamel and shining nickelplated metal or various color combinations to match the modern bathroom and *it is accurate.* After your morning bath, when you have thoroughly dried your body with a vigorous toweling, step on the scales, as nature made you. Then you *get your REAL, accurate weight.*

Keep a written record of your weight. This is important because if you trust to memory you may not note that weight has crept up on you a few ounces at a time since you started weighing yourself.

The weight your scale will show you, and its changes, must *guide your living.* From this weight you can regulate yourself.

It is surprising how even a slight change in diet will, in most cases, affect your weight. It is not at all unusual for a person to give up one single item of food and lose as much as half a pound a day. And while you would not detect a loss of half a pound of weight by ordinary standards your HEALTH-O-METER will tell you about it.

Older People Must Be Moderate

Older people especially should be most careful about making too rapid progress in reducing or putting on weight. Tissues harden with age and respond more slowly to treatment. The heart is less able to stand a severe strain. It is prudent to be moderate; indeed, it is essential if danger is to be avoided.

In this system we are giving you certain *definite information* about reducing and putting on flesh.

You will say perhaps that what we give you here is not new. That you have always known some of the facts given you here. That you've always understood that these systems have been prescribed for ages as the means to effect weight changes.

That is quite true. Perhaps we have gone further in this book than others because we have sought to give you *the system and the explanation of the system.*

This is an advanced age. People don't merely want to be told to do something. They want to know WHY they should do certain things to attain certain objects. So here we have tried to make simple and clear the systems that will result in the desired improvements.

We have given you here not only the *known and proved methods* of reducing and building weight, but also many "fad" methods that have much to recommend them because they are based on reasonable theories that lay claim to some merit. These are not endorsed, or recommended, they are merely quoted here because they are known methods and have been quite extensively discussed and used at different times.

About Fad Diets and Methods

Weight reduction by methods not covered in the diet and exercise system are sometimes called "fad methods." Some of them are based on real scien-

tific principles, but there is a danger in most of them since they do not consider individualities. What may be perfectly safe for some would be decidedly dangerous to others. So they should be adopted only on medical advice.

And while the question of medical advice is under consideration may we say that it is always safest to consult a physician before undertaking any method of reducing or building up weight. There may be some physical weakness of the system which would make it unsafe to follow even the simplest of diets and exercises. If you are in doubt tell the doctor what you are planning to do and ask his advice.

Where a treatment or system is recommended—at a distance and without intimate knowledge of the person and that person's physical condition—the recommendation is made with the understanding that a physician's advice should be secured as to whether the system is suited to the person. This we recommend most heartily.

The following diets and treatments are given merely as a matter of information.

The Famous Milk Cure

There are many versions of the story relating to the origin of the milk cure. Perhaps the best known is that the noted Father Kneipp originated it at his sanitarium in the Tyrol.

Here the dyspeptics and high livers of Europe went to be treated by the famous dietitian and restored to condition so that they might resume their course of high living for another period. High living is, of course, one of the principal causes of stoutness, and other nutritional disorders.

In an old castle, surrounded by beautiful grounds and wide lawns, Father Kneipp administered the milk cure. The "patient" was instructed to sleep in a cold room with windows wide open, a practice unknown in those days in Europe. Every morning the patient was routed out of bed early and sent to walk barefoot on the finely clipped green lawns. This was insisted on, probably to compel them to take a certain amount of exercise, and the idea of walking barefoot in the dew-wet grass was a novelty with a unique appeal to it.

Then for a period of time, carefully regulated to meet the condition of the "patient," he or she was placed on a milk diet only. No food at all was taken during the period of the cure, and no other drink than milk allowed. Each patient was assigned a special cow from the dairy stables, which were full of the beautiful Swiss cows, so noted for the high quality of their milk. The "patient" started in drinking a glass of milk at a time, as often as he

desired. The size of the glass was increased as the cure progressed. Mild laxatives were administered, if necessary, to keep the bowels open, and the cure lasted for periods of seven days to two weeks. In that time the milk had thoroughly cleaned out the system, had restored in large part the normal functioning of the organs, and when the cure was completed the patient went forth rejoicing, usually fifteen to thirty pounds lighter than when starting, and in far better condition of health. The daily repeated walks, the getting up early in the clean invigorating mountain air, and the exclusive milk diet had worked their wonders.

Milk diets are often recommended by physicians, but they should only be adopted on a physician's advice. The method is not unpleasant. The first day or two the lack of solid food causes discomfort and the craving for solids is rather hard to bear. But after the first two or three days the milk seems all sufficient and the "patient" actually enjoys going without food, drinking only milk.

Baked Potato and Milk Diet

This is not an unpleasant diet, but it grows tiresome. Large, good quality potatoes are selected, scrubbed and baked until the starch has been thoroughly converted into dextrose. They are then opened and set back in the oven for a few minutes to allow moisture to further evaporate. Then they are seasoned with salt and perhaps a dash of pepper and eaten whole, skin and all. One large potato a meal is allowed, and the potato diet is for every meal during a short period, usually five to ten days. With the potato is taken milk as a beverage. No butter, no cream, no other condiments are allowed.

This is quite a remarkable fat reducing diet, it is claimed, but it should be taken only on a physician's recommendation.

The Tomato and Egg Diet

For two days each week the followers of this diet eat one raw tomato and one egg boiled for 25 minutes until thoroughly hard. This diet is taken three times a day for two consecutive days of each week. Then repeated on following weeks. The rest of the time the reducer eats and drinks whatever is desired. The theory of this diet is not quite so clear. But it is said to effect some remarkable results. In this case also a physician's advice should be asked.

The Spinach Diet

Living on spinach alone, eating nothing else, but drinking milk, or unsweetened tea, is reputed to be one of the quickest and most effective weight-reducing diets imaginable. The spinach is either eaten raw, as a salad, or plain boiled, with salt, but without butter, cream sauce or other condiments.

Spinach is known to contain large proportions of minerals and to afford enough roughage, or cellulose, to prevent the patient from becoming seriously bowel-bound. This, too, should be taken only on the advice of a physician.

The Italian Grape Cure

In certain parts of Italy grape vineyard sanitariums have been established where sufferers from certain diseases, and obese people, are given a grape diet exclusively. This diet is said to regulate the body most surprisingly and is recommended by many physicians, especially in Europe, where they know most about the diet. The grapes grown in a certain section of Italy contain elements not always found in grapes and offer certain advantages not found elsewhere.

Epsom Salts Baths

For a while there was a great vogue for the Epsom Salts bath method of weight reduction. This is not recommended, but is quoted here as a "fad" method of weight reducing.

Epsom Salts can be bought in large quantities very reasonably. The cost is only a few cents a pound. The method pursued is to place from one to three pounds of Epsom Salts in a very hot bath. The hotter the better. The bather gets in and stays in for fifteen minutes, adding hot water as the bath cools and as a higher temperature can be endured by the body. After fifteen minutes' immersion, step out and, without drying, wrap a wool blanket around you and get into bed, piling up the warm bed clothes. Stay in bed for half an hour to an hour, as long as the profuse flow of perspiration continues. Then a cool sponging off and a smart toweling with a harsh, rough towel, and the day's treatment is completed.

This treatment undoubtedly results in marked losses of weight, but it is weakening. The loss of weight is due to the heavy perspiration caused by the very hot bath, superinduced by the Epsom Salts in the water, and by the perspiring in the wool blanket and heavy bed clothes after the bath. People have been known to "sweat out" five or six pounds at a time this way, but the repeated use of these "sweats" is injurious to the health. And the reduction is so rapid and violent that the tissues sag and look aged. People with weak hearts, and whose organs are not in the best condition should never consider this method, and then only on the advice of a physician.

Chapter III

Different Foods and the Theory of Weight Reduction

In the first place we shall try to explain to you very simply the methods of weight reduction, and the part that foods play in this process. For food is one of the principal causes of weight changes in healthy individuals.

There are three kinds of food—*tissue formers, energy and heat producers and those that produce both tissues, energy and heat.* Most all foods belong to the last named class. Foods to be of value to the body must be digested and taken up by the blood stream, which carries them to the various tissues of the body, where they are either used or stored up for future use.

After food is used waste products are produced which are taken up by the blood and given off in the urine, perspiration and by the bowels. Certain parts of the food are kept as part of active tissues and other parts are stored, such as fats. Too much fat stored in the body is very rarely a healthy condition.

The tissue-builders are those which are necessary to rebuild the tissues which are constantly being destroyed in living, working, moving and generating energy and heat.

The human body is a very wonderful machine. It wears itself out in living and rebuilds itself at the same time. Destroyed tissue must be replaced. To do this we need certain foods containing proteins, mineral matters and water.

Energy, necessary to physical effort, is produced by fats, carbohydrates and proteins.

When an athlete runs a mile at top speed he burns up tissue and uses up energy. After such a run the scales will show lost weight. The muscular effort has destroyed tissue. If it is a warm day the body will throw off this destroyed tissue in abundant perspiration. Fat forms in thick, heavy layers, on the walls of the body cavity around the organs, and it is distributed throughout the entire muscular tissue of the body, striping it in between the layers of muscle, as you see in a cut of prize beef when the solid meat is mottled and striped with the white fatty layers.

A Balanced Food Ration

A balanced food ration is one that contains in fairly certain amounts *all* those foods which are needed by man in order that the natural processes in the living body may go on and health may be kept.

A balanced food ration does not mean that all necessary kinds of food required by the body should be eaten at the same meal nor even the same day. Vary your diet but do not put a mixture of a great number of different foods into your stomach at the same time.

Fat or thin persons do not eat a balanced ration, they eat too much of particular foods. Some of the foods mentioned in the following paragraphs should be eaten, but not such large amounts of them, and certainly not all at each meal. Do not eat beans, peas and potatoes at the same meal, for example.

The balance between tissue building foods and heat and energy foods must be considered when figuring on a diet. Many of the tissue-building foods also have a high percentage of heat value. So lean beef is rich in proteins, while fat beef is rich in both proteins and fats.

Beans and peas are high in carbohydrates and starches, which are fat builders. They average between fifty and sixty per cent of their weight in fat-producing food elements. Lentils, not eaten so often in the United States, but a staple article of diet abroad, are in this same category. Peanuts, and all nuts, for that matter, are high in oil fats. They are very fattening. So bean or pea soups, baked beans, etc., while they are tissue building foods, are also fat producing.

The most fattening food of all, ounce for ounce, is butter. Many have found that by eliminating butter from their diet, they have been able to achieve quite notable reductions in weight. One does not lose fast, but if suitable eating is persevered in, the results are surprising. Nevertheless, butter should not be entirely eliminated from your diet because it contains elements you need.

Bread is high in protein, and in starches that are hard to digest. White flour has been degerminated in the refining process and therefore lacks vitamins. White bread is too soft and spongy a food and is frequently the principal cause of constipation in an individual. It should be avoided. Whole wheat, or graham bread is highly nourishing and contains a certain element of cellulose which the body does not absorb, nor the stomach digest, but which is very helpful in assisting proper elimination. Whole grains contain vitamins essential to life.

Dietary for Weight Reduction

As said above, there are three types of foods, tissue builders and heat and energy producers, and those that produce both.

The tissue building foods are largely the proteins. The minerals are equally necessary. They come to us principally in water, in vegetables, and fruits.

The heat and energy builders (carbohydrates) are the real fat-producers and are the foods one must guard against most carefully in seeking to reduce weight.

You may frequently have heard fat people say: "I won't starve myself no matter what I weigh." That is a very foolish statement. *It is not necessary to starve yourself* to reduce weight. People often lose an average of half a pound a day merely by refraining from eating so much sugar, butter, fresh white bread and sweets. Surely abstaining from such foods does not mean starvation. Good soups (clear, not cream soups), meats like rare lean beef, lamb, mutton, chicken if roasted or broiled; vegetables, salads, fruits, do not constitute a starvation diet. Fish, too, if not fried, cheese in moderation, eggs, lean ham, liver, bran rolls, bran muffins, toasted thin slices of bread that are slightly stale, all these offer a wide variety of foods, but do not represent starvation.

The late Professor S. J. Meltzer of Rockefeller Institute, New York, has proved that a person eats about three times as much food as is actually needed to prevent hunger or unfavorably affect the health. Most people eat more than is good for them. More than their body needs is then stored as fat. They may think they are hungry, but they are not. They are drunk with food—and, like the drunkard wanting another drink—want more food. The drink too many is what makes the drunkard. Too much food is what makes the fat person fat.

Prudent eating in moderation means health. Health produces proper weight. Proper weight produces the form divine, the principal attribute of beauty.

The heat producing foods are butter, bacon, the leguminous or highly starchy vegetables like peas, beans, potatoes, sweet potatoes; starchy cereals such as oatmeal, rice, cornmeal; all these store energy, *and fat,* in the body.

Some foods contains both protein and carbohydrates but are classified according to the predominating quality.

These Are Non-Starchy Vegetables

We list here those vegetables not decidely starchy and which are usually eaten cooked. Many can also be eaten raw as salads:

Asparagus	Brussels Sprouts	Cucumbers	Cabbage
String Beans	Endives	Cauliflower	Celery
Dandelion Greens	Summer Squash	Green Lima Beans	Spinach
Tomatoes	Green Corn	Green Peas	Garlic
Onions	Oyster Plant	Kohlrabi	Egg Plant
Lettuce	Salsify	Artichokes	Radishes

Here is ample variety of appetizing food which, with a lean meat, fish, poultry or egg dish, will furnish an ever new and attractive menu for your table. Rutabagas, turnips, parsnips, carrots and beets are rich in sugars, and while these are excellent in salads for thin people they are not recommended for fat ones. Watermelon and cantaloupe may be classed as non-starchy vegetables, but should always be eaten alone as a light meal because of their tendency to fermentation.

Here Is a List of the Protein Foods

Protein foods are necessary to rebuild the wasted tissues and make good, red, vigorous blood. But in reducing weight the quantity of protein food taken must be reduced as well as the quantity of carbohydrates:

Meats—	*Poultry—*	*Sea Foods—*	*Various*
Beef	Chicken	Fish	All Game
Pork	Turkey	Oysters	Cheese
Lamb	Duck	Clams	Eggs
Mutton	Goose	Shellfish	Nuts
Veal	Guinea Hen	Mussels	

Sea food is very fattening and should be avoided by persons dwelling inland, especially where iodized salt can be had as part of the diet.

It is a safe plan to follow that these *high protein foods should not be eaten at the same meal with starchy foods,* and that more than one protein at a meal should be avoided.

These Are the Starchy Foods

Starchy foods may be eaten by themselves occasionally, with the exception of white flour foods. But it is advisable not to eat more than one starchy food at a meal, and to avoid eating starchy foods with protein foods. Here is a list you should note carefully:

Irish Potatoes	Rice	Oatmeal	Pancakes
Sweet Potatoes	Noodles	Wheat Cereals	Waffles
Pumpkin	Spaghetti	Rice Cereals	Baking Powder Biscuits
Hubbard Squash	Macaroni	Cornstarch	
Beans	Bananas	Lentils	Dried Lima Beans

Noodles, spaghetti, macaroni, wheat cereals, rice cereals, cornstarch, oatmeal, etc., are high in both proteins and starches. They should never be eaten with meat or fish. They make a good substitute for meat as they have the same fattening value and should be thought of as meats in arranging the diet of the obese or thin persons.

All foods made from whole grains are permissible, though high in starch. White flour, degerminated and demineralized cornmeal, polished rice, pearled

barley, prepared cereals where the germ and salts are extracted, should never be eaten. Ordinary bolted rye flour is as bad as white flour. Many of the cereal breakfast foods should never be eaten if you want to reduce your figure, retain your slenderness and your health.

Navy beans, dry lima beans, kidney beans, dry lentils, dried peas and peanuts are all rich in protein as well as starch. They are hard to digest and should not be eaten with other starchy foods, or with proteins or with fresh fruit. With salad and cooked vegetables, or the sweet dried fruits such as prunes, dates, figs and raisins, however, they constitute a full meal.

Milk is largely protein and should be classed as a food and not as a drink. It is a most desirable food, easily digested and can be taken in moderation with most any other food. It is not a good idea however to drink milk with meat because it has a tendency to delay digestion of the meat until the milk is digested.

A Custom Founded on Wisdom

Visitors to certain European countries and to California are often amused at being served with a salad first. This is custom which modern scientific knowledge tells us is founded on real dietary wisdom.

Many of these are fruit salads, offering a variety from the vegetable salads. Partaken before a meal, they activate the salivary and gastric glands and thus aid digestion. They also reduce the amount of other foods eaten at that meal.

These should be raw salads, not made of cooked ingredients, and should not contain cantaloupes, watermelons or yellow bananas. The two former have a high fermenting capacity and the latter unless thoroughly ripe, with brown spots, or firm brown skin, is usually rich in starch in a condition hard to digest because bananas are not matured until the starch is converted into sugar, but all bananas are fattening.

Apples, pears, peaches, oranges, grapefruit, pineapple, cherries, grapes, plums, apricots, and berries of various kinds, afford materials for delicious salad combinations that the housewife can use to advantage.

Fruits that are aciduous should be eaten only with protein meals. Fresh vegetable salads should go with starch and can also be eaten with protein meals.

These Simple Rules Will Help You

To summarize all that has gone before let us lay down a series of a dozen "don'ts" to be observed in reducing weight:

1. Don't eat proteins and starches at the same meal. Vary your selection of foods, but reduce the total amount.
2. Don't eat more than one starchy food at the same meal.
3. Don't eat white flour breads, pastries, sauces, cakes.
4. Don't overeat, no matter what you eat. Reduce the total amount of fat producing foods.
5. Don't eat rich desserts or large amounts of candy.
6. Don't eat fried foods of any kind.
7. Don't wash your food down with copious drinks of water.
8. Don't swallow your food until it is thoroughly masticated.
9. Don't drink too much water while your stomach is digesting food, but drink plenty between meals.
10. Don't eat fats, butter, fat meats or nuts, except sparingly, and do not eat fried foods of any kind.
11. Don't eat between meals.
12. Don't go to bed too soon after eating. It is very fattening.

As against this DOZEN DONT'S here is a dozen simple rules for eating that will help you reduce weight:

1. Eat more bulky foods, such as fresh vegetables, preferably raw, every day.
2. Eat plenty of fruit, fresh or cooked.
3. Eat lean beef, lamb, mutton, veal, poultry and fish.
4. Drink plenty of water just before meals and in the morning.
5. Eat eggs, milk, cheese, as an alternative to meat.
6. Eat slowly, and in moderation, masticating thoroughly.
7. Eat enough but get up from the table without that satisfied feeling that comes from overeating.
8. Eat salads, both vegetable and fruit, with meals.
9. Eat foods that supply the necessary mineral elements, green vegetables, milk.
10. Eat to supply your body needs, not your perverted appetite.
11. Keep your bowels open and regular. This is important.
12. When tired or fatigued—*rest.*

Chapter IV

The Element Content of Food

In the preceding chapter we assembled our common foods into three separate classifications—starchy, non-starchy and proteins. There is another classification known as the "element content" of each of the foods.

Inasmuch as the foremost dietary authorities now recognize the "element content," it is well to mention here these elements, and some of the foods in which they are found.

There are groups of food which unite in the process of digestion to form a chemically alkalin condition which is healthful, and likewise another group of foods that produce chemical acidity which may lead to ill-health or disease. A proper balance of these foods, once their classification is understood, will do much toward the improvement of general health.

Dietitians are generally agreed that an alkalin ration of approximately 4 to 1 makes the most satisfactory diet combination for general good health. This means four times as much alkalin forming foods as acid forming foods.

Alkalin Forming Foods

All fruits, fresh and dried, except *large* prunes, plums and cranberries.

Limes	Dates	Apples	Oranges
Apricots	Small Sun Dried	Peaches	Grapefruit
Raisins	Prunes	Pears	Lemons
Figs (unsulphured)	Honey	Pineapples	

All vegetables, fresh and dehydrated, except legumes, (dried peas, beans and lentils) rhubarb.

Rutabaga	Spinach	Onions	Turnips
Radish	Asparagus	Green Peas	String Beans
Lettuce	Beets	Celery	Oyster Plant
Tomatoes	Cabbage	Carrots	Egg Plant
Parsnips	Cauliflower	Kohlrabi	

MILK

All forms, buttermilk, clabber, sour milk, Cottage cheese, cheese.

There is a close relationship between alkalin forming foods and the non-starchy list printed in the foregoing chapter.

Acid forming foods are found mostly in the protein list, but they should be a part of the general diet, eaten only in the 4 to 1 ration. In the starchy food list will be found other acid forming foods.

Starchy foods in combination with fruits or proteins are acid combinations and should be avoided.

Acid Forming Foods

All high protein foods—white sugar, syrups made from white sugar.

MEATS

Beef, Pork, Mutton, Sausage, Lamb, Veal, Ham.

POULTRY

Chicken, Turkey, Duck, Goose, Guinea Hen, Game.

FISH

Oysters, Clams, Lobster, All Fish, Fish Roe.

VISCERAL MEATS

Beef hearts, Brains, Kidney, Liver, Sweetbreads, Pig hearts, Calf hearts, Thymas.

EGG WHITES

Yolks are not acid forming.

NUTS

Peanuts, English Walnuts, Pecans, Filberts, Cocoanut.

LEGUMES

Dried Beans, Dried Peas, Lentils.

ANIMAL FATS

Beef fat, Pork fat, Bacon, Fish oils, Lard, Tallow.

ALL CEREAL GRAINS

AND OTHER PRODUCTS, such as, bread, breakfast foods, etc. Rolled Oats, Corn Flakes, Corn Meal Mush, Polished Rice, etc.

Large Prunes, Plums, Cranberries, Rhubarb.

Food Elements

And now that these foods are classified as to digestive reaction we consider the elements and chemical combination that may influence these re-

actions. An analysis of the human body of average size and weight reveals the following sixteen elements in the approximate amounts shown.

Oxygen (89 lbs.)
Hydrogen (15 lbs.)
Nitrogen (2 ozs.)
Carbon (45 lbs.)
Calcium (4 lbs.)
Iron (2 ozs.)
Iodin (¼ oz.)
Chlorine (1¾ lbs.)
Sulphur (3¾ ozs.)
Flourine (3¾ ozs.)
Phosphorus (2 lbs.)
Potassium (¼ oz.)
Sodium (3 oz.)
Magnesium (3½ oz.)
Silicon (1¼ oz.)
Manganese (½ oz.)

The following is a list of the various elements and the foods in which they are found:

OXYGEN—In all foods—both good and bad.

HYDROGEN—Melons, fruits, soups, broths, fish, frog legs, lamb, veal, tongue, tenderloin, water, watery vegetables are richest in Hydrogen.

NITROGEN—Meat, peas, ham, white of egg, navy beans, kidney beans, lima beans, raw peanuts, walnuts, chuck, dried beef, flank, cottage cheese, almonds, butternuts, sturgeon, herring, mackerel.

CARBON—White bread, doughnuts, cookies, white flour in cake, pie or pastry, macaroni, crackers, spaghetti, tapioca, candy, ice cream, malted milk, polished rice, white sugar, potatoes, without skins, graham flour, sago, pancake, puddings.

CALCIUM—Spinach, steel cut oats, whole wheat, whole rye, halibut, cheese, onions, garlic, rhubarb, milk, raw cabbage.

IRON—Beets, whole wheat, whole barley, lettuce, spinach, lentils, peas, green peas, red cabbage, carrots, asparagus, yellow corn, ripe olives, unpolished rice, onions, blackberries, cherries, blueberries, strawberries, raspberries, pears, loganberries, gooseberries, peaches, raisins, apples, concord grapes, rare beef, calf's liver, raw egg yolk, walnuts, almonds, beechnuts, rye, currants, cucumbers.

IODIN—Iodin sea lettuce, cod liver oil, smoked salmon, skin of baked potato, clams, lobster, oysters, shrimp, green turtle, mushrooms, onions, tomatoes, pineapple, crawfish, scallops, garlic, peas, pears.

CHLORINE—Ham, sauer kraut, salty fish, rare meat, dried beef, carrots, spinach, cocoanut, radishes, cabbage, carrots, lentils, lettuce, cucumbers, Roquefort cheese.

SULPHUR—Raw egg yolk, shrimp, brussels sprouts, cabbage, horseradish, onions, turnip, cauliflower, kale, garlic, mustard, radishes, kohlrabi, cucumbers, asparagus, figs, prunes, dark cherries, gooseberries, blueberries, strawberries, cocoanut, carrots.

FLOURINE—Raw egg yolk, watercress, brussels sprouts, cauliflower, Roquefort cheese, garlic, cabbage, beets, spinach, mackerel, black bass, bluefish, oysters, Swiss cheese.

PHOSPHOROUS—Raw egg yolk, whole wheat, almonds, walnuts, fish, barley, rye, peas, lentils, raw cabbage, milk, steel cut oats, etc.

POTASSIUM—Blackberries, wild cherries, watercress, lettuce, spinach, parsley, dried olives, green corn, blueberries, tart apples, cocoanut, dandelion greens, lentils, Swiss chard, cabbage, endive, carrots, beets, romain, green beans, black figs, prunes, peaches, whole wheat, egg yolk, asparagus, grapefruit.

SODIUM—Okra, celery, spinach, strawberries, carrots, salt, apples, ham, gooseberries, prunes, raw turnips, peaches, lentils, cheese, oats, beets, cucumbers, string beans, asparagus, figs, rare beef, lamb.

MAGNESIUM—Citrus fruits, egg yolk, spinach, cocoanut, goat's milk, almonds, walnuts, beechnuts, chestnuts, rye, whole wheat, grapes, barley, cherries, green corn, gooseberries, sole, frogs legs, lamb, chicken, oats, peaches, peas, prunes, shredded wheat, apples.

SILICON—Steel cut oats, spinach, apples, barley, egg yolk, strawberries, peas, figs, goat's milk, beechnuts, grapes, almonds, walnuts, chestnuts, carrots, shredded wheat, unpolished rice, rye, peaches, cherries, whole wheat, asparagus, cabbage, gooseberries, cucumbers, endive.

MANGANESE—Egg yolk, watercress, endive, almonds, beechnuts, walnuts, parsley, peppermint, wintergreen.

Chapter V

Foods Essential to Life

Vegetables are vitamin containing foods essential to life. Some people actually gain or lose weight because they eat large quantities of foods containing little or no vitamins—for example, starchy potatoes.

Green vegetables are healthful foods, as they supply mineral matters the body requires, are very low in calories, contain cellulose matter which acts as scouring medium for the intestines, and satisfy the appetite because they provide bulk. They are largely water, averaging 90 per cent in water content. Eaten with a diet of lean meat, eggs, milk or graham bread they balance the ration, yet create little or no fat. Among the vegetables that will vary the diet agreeably may be mentioned Brussels sprouts, tomatoes, celery, cabbage, cauliflower, spinach, cucumbers, salsify, endives, asparagus, red cabbage, greens, such as beet and dandelion greens, artichokes, etc.

Here then is an almost endless list from which to select variety in foods. Of course, these vegetables should be cooked plainly, not fried or served with rich cream gravies, butter, oil, or other fattening elements.

The reason vegetables are recommended in diets for stout people is that while they satisfy the craving for food only a part of them is absorbed into the system. They are largely water, but they furnish the necessary roughage for proper elimination. This is always a serious problem in dieting. The tendency of most diets is to cause constipation. People cut down on the amount of roughage foods they eat until there is practically nothing left for the intestines to eliminate. This causes many intestinal disturbances and has brought into the American market an infinite number of cathartic preparations of all kinds. These are most injurious and are the cause of much prevalent stomach and intestinal troubles. They draw all the moisture from the intestinal walls, leaving them dry and parched so that constipation becomes chronic, with the result that many people are unable to stool without using a cathartic.

Potatoes, carrots, beets, turnips, contain large amounts of starch and sugars. They are very fattening and should not be eaten, or else eaten in reduced amounts while reducing weight.

One of the most important features of eating vegetables is the amount of mineral contents they bring to the body to replenish the mineral require-

ments of the tissues and the blood. They have the effect of reducing acidity. The mineral contents of vegetables supply the blood with iron, calcium, magnesium and other minerals that are vitally necessary to health. For this reason spinach and other vegetables are often prescribed for fat and thin people who suffer from anemia, a disease which produces a washed-out, white, pasty complexion. Most fat people are anemic. Most people suffering from simple skin eruption are benefited by a vegetable diet.

Fresh Fruit As a Body Regulator

Fresh fruit, as well as cooked fruit, should be in the diet of every person. This does not mean that a fat person can gorge himself with fruits and still reduce, because fruits contain large amounts of sugar in the form of pure carbohydrates, which are great fat producers. In combination with other foods a sufficient amount of fruit may be eaten to secure its laxative and vitamin effect.

Taking a wineglass of orange juice half an hour before breakfast has been the means of correcting many cases of chronic constipation and other intestinal disorders.

Today advanced specialists in the treatment of infants prescribe giving orange juice twice a day to infants after they have been weaned.

But this is not the only virtue of oranges. They contain digestible sugar and acids and minerals that are enormously valuable to the human body.

Fresh grapes, cherries, pears, apples, strawberries, raspberries and plums are all rich in easily digested sugar and in valuable acids and minerals, but peaches and apricots are too high in sugar content and should be avoided when reducing.

Plums, known commercially as prunes when dried, are good bowel regulators. So are figs, but they contain too much sugar for a reducing diet.

Raisins are very high in dextrose, an important food element, and sugar iron. Both essentials to health, but too high in sugar for a reducing diet and should be avoided.

Grapefruit is becoming known as a fine health fruit, with many of the qualities of oranges and certain added values over which dietitians are debating. The claim is that the juice of grapefruit is a good blood purifier, and especially valuable in cases of fever.

Bananas are high in starches, but low in protein values. They should be avoided when reducing. Baking or cooking bananas produces dextrin, which is sugar, and produces much fat.

The dried fruits in common use are very high in calories. Dates and raisins are about equal in this respect. A pound of each yields over 1600 calories.

So when you read that the Arab lives a day on a handful of dates, it is not such an exaggerated statement as it seems.

Dried figs have a calory value of nearly 1500 and prunes of 1400 to the pound. Stewed figs, after absorbing moisture, have a calory value of about 800 and stewed prunes of about 400 to the pound.

Apples are one of the most healthful of fruits if well ripened.

Grapes are an excellent tonic for the stomach and a fine food. In some sections of the world grape cures are prescribed for many intestinal troubles. The person taking the cure eats as much as eight pounds of grapes a day. The acids in grapes act as a mild laxative.

Nuts are not recommended to any stout person who desires to reduce. They are too rich in oils, hard to digest, and this in spite of the many nut faddists who will tell you that we should emulate the squirrel and live on nuts. Of all nuts, the chestnut is probably the highest in general food value. In certain parts of the world chestnuts constitute the main article of diet. They are eaten roasted, boiled, ground into flour and made into bread, cakes and cereals. Almonds are also used extensively as food and are largely used in the preparation of diabetic foods.

Foods having a high caloric value are called concentrated foods. They are usually sugars, or carbohydrates, sometimes called pure carbohydrates. They are quickly turned into fat when eaten because the large amount of caloric value replaces other caloric food items that should be, but are not eaten. Foods of high caloric value should not be allowed to replace other good foods.

Avoid All Breads from White Flour

There is no greater foe to slimness than white bread—breads of all kinds made from white flour. Commercial white flour, in the process of manufacture, is robbed of the best elements of the whole wheat. It is starch in its most fattening condition. So avoid breads, rolls, cakes, cookies, waffles, pancakes, cream sauces, cream soups, etc., made with white flour.

To reduce, eat moderately of whole wheat bread and bread made from graham flour, also bran breads, and bran cookies, muffins, etc.

Do not eat corn bread, corn pone, cornmeal mush, corn cakes or muffins.

Potatoes are highly starchy. Cooking potatoes turns the starch into dextrose, a concentrated starch sugar which is very fattening. Therefore

eat very little potatoes in any form. The only way potatoes should be eaten by a stout person, or any other person, is well baked in their skins. Wash and scrub potatoes thoroughly. Then bake in a fairly fast oven until thoroughly well done. Before serving, open the potato, scoop out the inside except one-half inch under the skin (and throw it away), put the potato back in the oven for a few minutes. The heat will have largely converted the starch into dextrose. Eat the skin and all because the valuable mineral elements are in and under the peel.

You can salt baked potatoes or add a little paprika, but don't soak with butter, or gravy that is thickened with flour, or they again become very fattening. Go light on salt, most people eat a great deal too much salt.

Peeled and boiled potatoes are most fattening, so are mashed or riced potatoes. Fried potatoes are, of course, even more fattening whether French fried or so-called German fried. Creamed potatoes, au gratin potatoes, and the addition of milk, cream, or butter, are banned for stout people.

About Cereals and Their Use

Some cereals made from whole grain are desirable because they combine the food elements with the bran, which is largely mineral. Good whole oats, whole wheat, whole rice (brown)—not the white rice of commerce, but the unpolished grain with the outer shell intact, are all good foods, but the refined grains should be avoided, unless enormous amounts of green vegetables are eaten to make up the deficiency in vitamins and to do this may be impractical. The caloric food value of rice is about the same as that of a potato. It is good food on which a thin person will gain weight. Rice puddings are especially good for this purpose.

Plain rolled oats, boiled whole wheat, or whole wheat as in shredded wheat biscuits and triscuits, are healthful, nourishing and stimulating. But the grain cereals made from polished or stripped grains are not for those who desire to lose weight, nor are they fit food for anyone.

Cereals should be eaten dry or with a very little melted butter or honey. The addition of salt, or of sweet dried fruits, is recommended, if you desire, but they should be eaten sparingly. You can have a little milk if you must, but do not wash the cereal down with the milk. Fresh acid fruits (most of them are acid) should be avoided with starchy foods, as they are liable to cause excessive fermentation in the stomach.

In reducing, do not eat leguminous foods, beans, peas and potatoes, at the same meal. A good rule is one kind of cooked vegetable of this sort at a meal. Make up the difference with non-starchy vegetables or a plain salad. One starch at a meal is enough. Besides, different starches digest in different times, and why complicate matters? The same thing holds true with proteins.

Soups are Excellent Foods for Stout People

Clear soups made by boiling lean meat and vegetables together are excellent food for stout people. This is due to the fact that in boiling beef and vegetables the essential food elements, especially the minerals found in vegetables, are retained in the soup. In cooking most vegetables these valuable elements are lost when the cook throws away the water in which they are boiled. Boil the water down and use it, do not throw it away.

Avoid cream soups, such as cream of tomato, cream of celery, cream of mushroom, cream of potato, pea and bean soup. They contain white flour, milk and butter in fattening proportions. Use what the English call "clear soups," made with meats, vegetables and flavoring, and you will get easily digested, wholesome foods that are not fattening.

Sugar is one of the greatest foes of fat people—it keeps them fat. Therefore sweets, puddings, pies and pastries should be avoided. In place of these sweets eat jellies without whipped or plain cream, stewed fruit, cheese, ices and ice cream in moderation. Ice cream is fattening, but eaten in moderation it is good food. Where sweetening is necessary it is better to use honey or maple syrup in small amounts. Highly refined white sugar has been robbed of essential mineral elements. It is misbranded "pure." A very small amount of hard candy—lemon drops or peppermints—will supply all the sugar requirement of the human body and will not make a fat person gain weight, but will help a thin person gain weight. It is the combinations of white flour, sugar and fats that go into pies, pastries and puddings that put these on the taboo list.

Salads Should Be Part of Your Daily Diet

Salads as diet foods are highly recommended as weight regulators. Made from non-starchy, fresh vegetables in the raw state, they furnish many of the essential elements to the blood and tissues, are a blood tonic and furnish bulk for the intestines to work on.

Lettuce, cabbage, endive, celery, celery-cabbage, spinach, dandelion greens, carrots, tomatoes, onions and asparagus tips, afford a wide variety of materials for salads that are delicious and good for you.

These vegetables are particularly valuable in furnishing the necessary vitamins, those mysterious food elements which scientists have been able to classify but not to isolate, and which science has found to be absolutely necessary to life. Then, too, vegetables are rich in mineral salts.

Eaten with a dressing of good olive oil, lemon juice, salt and a dash of pepper they will give surprising results in clearing up the skin and giving you that much advertised "schoolgirl complexion."

Thin persons desiring to gain weight should use plenty of olive oil on their salads. Stout persons should avoid it as much as possible, using more lemon or vinegar. There has been much discussion as to the good or bad effects of vinegar, but the most recent and reliable investigations do not condemn the use of vinegar in moderation. Lemon juice is excellent and preferred by many. Olive oil is purgative and thus helps to clear the complexion, but it is also very fattening.

Salads should be eaten raw, not cooked, to get the best results from them. A simple, easily made mayonnaise dressing is also good. To make this, break an egg in a bowl, add a teaspoonful of lemon juice and three tablespoonsful of oil (olive oil is best, but some substitute may be used), then beat for thirty seconds. Continue to beat rapidly, adding oil slowly. Salt to taste. More oil makes it thicker. More lemon juice thins it.

Sweet or sour cream, well beaten, can be added to this dressing if desired.

All Fried Foods Should Be Avoided

Fried foods, whether meats, fish or vegetables, should never be on the diet of the stout person. All foods absorb fats in the process of frying. Some more, some less, but all more or less, and the very process of frying makes foods hard to digest and interferes with the digestion of other foods.

Meats should be broiled, roasted, baked, stewed or boiled. Broiling and roasting seals the juices into the meats and makes them more delicious. If stewed or boiled with vegetables, meats take the flavoriness of the vegetables and become more delicious. Avoid using fats in stewing. Many chefs fry meats in fat before stewing to sear the outer cells and keep the juices in the meat. This makes them easier to digest, thereby adding to the caloric value taken into the body.

Fish is best broiled, baked or boiled. Do not fry it for the same reason that fried meats and vegetables are injurious.

Avoid creamed fish or cream sea foods, for the same reason that you avoid creamed vegetables and soups. If you want to cream foods, use plain cream, without butter or flour. The cream will thicken in cooking and is more delicious and not so indigestible

Chapter VI

The Physiology of Digestion

All foods must be reduced to a liquid before they can be assimilated by the body.

The human system needs plenty of water. The great mistake most people make is in drinking copious quantities of water with meals. This is bad because the water is often used to wash down the food.

Drink two glasses of water before a meal and a glass after the meal and you will not want much water during the meal.

It is a good plan to drink two glasses of water on arising, before eating breakfast. Many find that drinking hot water on an empty stomach is the best kind of a tonic. Drink the water at a reasonable temperature, cool enough to be pleasant, or hot, as you desire. After you have finished a meal and the process of digestion has started, do not drink any water until digestion is completed. Adding a lot of water to the contents of the stomach while it is in the process of digesting the food often upsets the stomach, slows digestion.

Foods to be properly digested, must be thoroughly masticated. Thorough mastication does two things that are essential. First, it sends the food to the stomach well broken up so that the gastric juices can reach all of it quickly and easily. Second, it permits the saliva to permeate all of the food so that when it goes into the stomach it is in a semi-liquid form. The saliva contains an element called Ptyalin. Ptyalin acts on the food, starting the digestive processes. It is essential to good digestion. Nature provides ptyalin in the saliva as you eat. If you overeat you often notice that after the heavy meal the mouth seems dry, you are thirsty. This is because you have eaten so much that you have overtaxed the salivary glands. It takes them time to replenish, so you feel the dryness and thirst caused by lack of saliva.

Starch foods should be eaten as dry as possible. The reason for this is because starch foods digest in the alkaline medium of the saliva and by alkaline medium in the intestines. The ferment ptyalin in the saliva ceases to act when the mixture becomes acid or even neutral. Digestion of starches, therefore, starts in the mouth. Unless the starch foods are thoroughly masticated and insalivated there will not be sufficient mixture with the ptyalin to insure proper digestion. Washed into the stomach by other liquids be-

fore it has become properly mixed with the saliva, digestion cannot proceed and fermentation is the result. The old supposed standard bread and milk is not good, nor cereals soaked in cream or milk, or bread or toast dipped in soup, tea or coffee.

Protein foods are digested by the acid gastric juices of the stomach. Eating protein with starch will stimulate an excessive flow of these acid juices and impair the digestion of the starch. Likewise the digestion of the protein will be impaired. Excessive fermentation in the stomach of undigested starch and the putrefaction in the intestines of undigested protein should be prevented by avoiding the mixing of protein and starchy foods at the same meal. Starch alone does not stimulate the flow of gastric juice. Omit acid fruits with starch but eat them with protein.

A good rule to observe is to get up from the table before you are full. Eating until you feel satisfied is a bad habit and not a necessity. People usually eat too much. Do not overtax your liver and other organs. The excess you eat goes into stored up fat and is not needed for use at the time you eat it. That stuffy feeling one feels after eating too much is a species of suffocation due to overloading the stomach with foods that are slow and hard to digest.

So eat enough to prevent actual hunger after you have left the table, but not too much. This habit of overeating to satisfy an abnormal hunger will pass as you practice eating less. Drink plenty of water before meals, and directly after, but not while eating.

About Tea, Coffee and Chocolate

Tea with lemon is a good beverage in moderation in spite of the stimulants it contains. So is coffee if taken in moderation. These two drinks should be taken clear, *not with cream and sugar.* The cream and sugar make them fattening. If you become accustomed to taking them clear and unsweetened you will in time like them so much better that you will never want to dose them with sweetness or add the fats of cream.

Both tea and coffee should be taken in strict moderation. They contain elements that, while not particularly injurious in small quantities, are nerve stimulants and may cause sleeplessness, which is not good for the health. Tannin and caffeine are the dangerous elements which may stimulate the nerves too highly.

Both tea and coffee stimulate the body. The first effect is immediate and is due to the warmth and the aromatic essences they contain. But the real stimulation does not come for two or three hours later. That is why coffee drinking creates such stimulation of the nerves as to produce sleeplessness. If you drink coffee just before going to bed, or tea, you can go to sleep and sleep soundly, while if you wait a couple of hours it will

make you wakeful. In moderate amounts these substances act as diuretics and are good weight regulators.

There is a coffee on the market from which some of the caffeine has been removed by a chemical process. It is somewhat safer than ordinary coffee and you will not suffer from sleeplessness if you drink it.

Chocolate contains some of these stimulating elements and is also rich in fats. It is nearly always made with milk or cream and sugar. So it is fattening, but excellent food in moderation for the underweight individual. Cocoa is said to contain theo-bromine, but the amount is negligible.

If you want a stimulating hot drink try hot water in which you have squeezed the juice of a lemon. It will warm you throughout, activate the circulation of the blood and will neither fatten or overstimulate you. Another excellent and healthful drink is made with hot water and "Vegex," a yeast product now on the market.

Milk is an excellent and necessary vitamin containing food and should be classed as "food" and not as "drink."

Chapter VII

Determining Your Food Requirements

In choosing the foods to make up your daily diet, the first essential is that they be in the proper dietary balance, and after that, they may be measured by the calory standard.

Now let us get the calory straight.

The usual basis of computing heat and energy values is the calory. This is a theoretical figure based on the heating value of foods. The explanation of what constitutes a calory unit is technical. It is supposed to be the ability of a food to produce enough heat to raise the temperature of a unit of water one degree.

You cannot live on "calories" and a great deal of harm has been done by attempting to gain or lose weight on a diet which only considered the amount of calories. The first and most important consideration in diet is the proper foods to give all the bodily requirements (this is the Maintenance Diet) and the second consideration is the quantity. Understanding the importance of food selection, the calory is a valuable unit of quantity measure.

The Maintenance Diet Table shown in this chapter, tells you how many calories per day you require for your age, height and weight. If you desire to lose weight you simply lessen the number of calories, and if you wish to gain weight you add more calories.

On Pages 44 to 64 you will find the Maintenance Diet Table which tells you the number of calories you should eat a day if you are not trying to reduce or put on weight. As you will notice, the number of calories depends on your sex, age, weight and height. For instance, if you are a woman doing no work, 24 years old and five feet five inches tall and have the normal weight of 132 pounds, reference to this table will show you require 1500 calories for your daily maintenance diet. If you weigh more than this and desire to reduce weight you simply cut down your calory intake. If you wish to gain weight you add more calories to your diet.

For your convenience in arranging a day's diet, we have compiled the following table of the most generally used foods showing what constitutes an average serving, its weight in grams, number of calories in the three classifications—carbohydrates, proteins and fats and total calories in the serving. This table will guide you in making up the necessary menus for your own

reducing program. Find out what your maintenance diet requirements are—from the table on page 44 and then compile your reducing diet from the table shown here.

Common Foods and Calories in Average Serving

Know What You Eat

FOODS	Average Serving	Grams in Serving	Calories of Each Class in 1 Average Serving			Total Calories in One Serving
			Carb.	Protein	Fat	
VEGETABLES						
Asparagus (cooked)	4½ stalks	96	9	8	28	45
Beans, String (cooked)	3 tablespoons	100	8	4	9	21
Beans, Navy (baked)	2½ tablespoons	85	66	23	19	108
Beets (boiled)	2 medium size	112	33	10	1	44
Beet Greens (boiled)	1 cupful	160	20	14	48	82
Cabbage (uncooked)	2½ cups shredded	165	37	10	3	50
Carrots (boiled)	3 medium size	120	45	5	4	54
Cauliflower (boiled)	3 tablespoons	90	17	6	4	27
Celery	4 medium stalks	84	11	4	1	16
Corn (on cob)	1 ear, 6″ long	92	28	4	4	36
Cucumbers (sliced)	3″ long	120	15	4	2	21
Egg Plant (cooked)	2 slices	60	12	3	1	16
Lettuce	½ head	150	17	7	4	28
Onions (boiled)	2 medium size	120	23	6	19	48
Peas (green cooked)	3 tablespoons	90	52	24	27	103
Potatoes (boiled)	2 medium size	80	64	8	1	73
Potatoes (mashed & creamed)	2 tablespoons	70	48	7	19	74
Potatoes (sweet) (cooked)	1 medium size	90	152	10	13	175
Radishes	5 medium size	56	14	4	2	20
Rutabaga (boiled)	3 tablespoons	105	36	5	2	43
Sauerkraut	2½ cups	180	27	5	4	36
Spinach (cooked)	2 cups	165	17	14	60	91
Tomatoes (fresh) (ripe)	1 medium size	200	31	7	7	45
SOUP						
Beef (home-made)	1 cup	168	6	29	4	39
Bean (home-made)	1 cup	168	62	21	20	103
Chicken (home-made)	1 cup	168	16	70	13	99
Pea (canned)	1 cup	168	50	24	9	83
Tomato (canned)	1 cup	168	38	12	13	63
Vegetable (canned)	1 cup	168	4	18	0	22
BEEF (Fresh)	Slice					
Roast (rib)	4″ x 2″ x ¼″	56	0	50	144	194
Porterhouse Steak	3″ x 2″ x 1″	56	0	42	90	132
Sirloin Steak	3″ x 2″ x 1″	56	0	38	81	119
Round Steak	3″ x 2″ x 1″	56	0	46	67	113
Liver	2″ x 2¾″ x ¼″	40	0	32	16	48
Tongue	3 slices	40	0	22	23	45

COMMON FOODS AND CALORIES IN AVERAGE SERVING

KNOW WHAT YOU EAT

FOODS	Average Serving	Grams in Serving	Calories of Each Class in 1 Average Serving			Total Calories in One Serving
			Carb.	Protein	Fat	
VEAL (Fresh)						
	Slice					
Cutlet (leg)	2″ x 2″ x ¼″	40	0	32	27	59
Loin	3″ x 2″ x 1″	56	0	45	54	99
Liver	2″ x 2¾″ x ¼″	40	0	30	19	49
LAMB						
	Slice					
Leg	3″ x 2½″ x ¼″	56	0	42	83	125
Chops (loin)	1 chop	45	0	34	114	148
PORK						
	Slice					
Ham (boiled)	4″ x 3″ x ¼″	45	0	44	56	100
Bacon (medium fat)	5 slices	25	0	9	151	160
Bacon (lean)	5 slices	25	0	15	95	110
Lard (refined)	1 tablespoon	15	0	0	135	135
FISH						
	Piece					
Halibut (broiled)	3″ x 2″ x 1″	30	0	18	11	29
Salmon	3″ x 2″ x 1″	30	0	26	34	60
Tuna (canned)	3″ x 2″ x 1″	30	0	26	11	37
Sardines	12 medium size	30	0	28	53	81
Oysters	8 medium size	130	17	31	14	62
DAIRY PRODUCTS						
Butter	1 tablespoon	15	0	1	114	115
Cheese	(Slice) 2″ x 2″ x 1″	30	1	34	96	131
Milk (whole)	1 glass	210	42	28	75	145
Cream (thick)	1½ tablespoons	30	5	3	49	57
Eggs (hen's) (boiled)	1 medium size	30	0	14	29	43
BREAD						
Bread (brown)	1 slice	30	56	6	4	66
Corn bread (johnny cake)	(Piece) 3″ x 2″ x 2″	45	82	14	18	114
Rye	1 slice	30	64	10	4	78
Graham	1 slice	30	62	10	4	76
Whole Wheat	1 slice	30	60	12	2	74
White (home-made)	1 slice	30	64	10	4	78
White (toasted)	1 slice	30	74	14	4	92
Biscuits (self-raising)	1 biscuit	45	106	14	9	129
Biscuits (soda)	1 biscuit	40	84	14	49	147
Rolls	1 roll	40	96	14	13	123
Zwiebach	1 slice	30	88	12	27	127
Soda Crackers	4 crackers	30	88	12	22	122

COMMON FOODS AND CALORIES IN AVERAGE SERVING
KNOW WHAT YOU EAT

FOODS	Average Serving	Grams in Serving	Calories of Each Class in 1 Average Serving			Total Calories in One Serving
			Carb.	Protein	Fat	
CAKE						
Chocolate Layer	1 slice	45	116	10	31	157
Cake (frosted)	1 slice	45	120	10	36	166
Cake (sponge)	1 slice	45	120	12	40	172
Doughnuts	1 doughnut	56	120	14	102	236
PIE						
Apple	1 piece	84	144	10	76	220
Cream	1 piece	84	188	14	85	281
Lemon	1 piece	84	126	12	76	214
Mince	1 piece	84	128	18	94	240
BREAKFAST FOODS						
Farina	4 tablespoons	96	285	51	12	348
Shredded Wheat	1 piece	30	93	12	4	109
FRESH FRUITS						
Oranges	1 large orange	148	68	4	2	74
Lemon Juice	1 lemon	28	10	0	0	10
Pineapple	3 slices	84	32	2	2	36
Raspberries	4 tablespoons	140	70	5	0	71
Strawberries	4 tablespoons	140	41	5	7	53
Baked Apple	1 average size	112	64	2	4	70
Applesauce	3 tablespoons	105	156	1	7	164
DRIED FRUITS						
Apricots	6 halves	35	27	6	1	34
Dates	5 dates	36	113	2	9	124
Figs	4 figs	105	301	18	3	322
Prunes	4 prunes	37	108	3	0	111
Raisins	¼ cup	36	109	4	10	123
NUTS						
Almonds	10 almonds	30	20	25	144	189
Cocoanut (prepared)	2 tablespoons	15	14	4	32	50
Peanut (butter)	3 tablespoons	18	12	21	75	108
Walnuts	8 halves	15	2	2	23	27
SUGAR						
Sugar (cane) granulated	1 tablespoon	15	60	0	0	60
Sugar (powdered)	1 tablespoon	15	60	0	0	60
Sugar (maple)	1 tablespoon	15	40	0	0	40

In the back of this book are reference tables showing 100 Calory Portions of Common Foods, and the weight of these portions. From those tables you can find the number of calories in the average serving of other foods by simply weighing the portion and comparing it with the weight of a 100 calory portion shown in the table, and using the following formula:

$$C = \frac{W^2 \times 100}{W^1}$$

Where C = number of calories to be determined

W^1 = weight of 100 calory portion in table

W^2 = weight of portion for which calories are to be determined.

For instance, if you have a piece of roast beef weighing three ounces, this figure is W^2. The table shows 100 calory portion of roast beef weighs 1.6 ounces and this is W^1.

$$\text{Therefore } C = \frac{3 \times 100}{1.6} \text{ or } 187\tfrac{1}{2} \text{ calories.}$$

Keeping ever in mind the necessity of balancing your diet, you can build other menus from the Reference Tables.

Complete tables of all kinds of foods, showing the chemical composition and calories can be secured from the government. Write to the U. S. Government Printing Office, Washington, D. C., sending ten cents, for Bulletin No. 28, published by the Office of Experiment Stations, U. S. Dept. of Agriculture, giving the Atwater and Bryant American Food Mate[illegible]bles. These tables will govern you in balancing your diet.

This bulletin illustrates the various cuts of beef, lamb, and pork and contains a lot of valuable information on foods. We urge everyone to procure a copy and study it.

Sample Reducing Menus

As suggestions, the following menus are offered. They are all built on the table and grouped by the calory content. An infinite number of appetizing menus can be built from that table. Don't feel, simply because you

are reducing, that your meals must be monotonous. Look what can be done with a

1000 Calory Diet

Breakfast

Stewed apricots
1 slice whole wheat toast, slightly buttered
Serving of honey
Black coffee—no sugar

Lunch or Supper

Combination salad
1 whole wheat roll
1 glass of buttermilk

Dinner

1 small piece broiled round steak
Lettuce and tomato salad
Asparagus—buttered
Sherbet
Black coffee—no sugar

Breakfast

Stewed prunes
¼ cup dried raisins
Black coffee—no sugar

Lunch or Supper

Serving of cottage cheese
1 slice of rye bread
1 glass of milk

Dinner

Serving of Tuna fish—lemon juice
1 med. size baked potato
Serving of string beans
Jello—little cream
Black coffee—no sugar

1200 Calory Diet

Breakfast

1 glass of orange juice with yolk of egg well mixed
1 baked apple—no sugar or cream
1 cup black coffee—no sugar

Lunch or Supper

1 vegetable soup—3 soda crackers
1 combination salad
2 graham or whole wheat rolls
1 glass of milk

Dinner

1 broiled lamb chop
1 serving of shredded cabbage and 3 or 4 sliced radishes
1 serving of buttered carrots
Cup of tea—lemon juice flavor—no sugar

Breakfast

1 serving of stewed prunes
6 stewed figs
Cup of black coffee—no sugar

Lunch or Supper

Lettuce and grape fruit salad
1 serving of buttered asparagus
1 whole wheat roll
1 glass of milk

Dinner

1 small slice of broiled ham
1 large serving beet top greens — lemon juice
Fruit salad
Cup of tea—lemon juice

1400 Calory Diet

Breakfast

4 or 5 stewed prunes
1 medium serving bran flakes, ¼ cup milk, little sugar, or
1 slice graham toast, ½ tablespoon butter
Coffee, ½ cup hot milk, little sugar

Breakfast

Grapefruit (no sugar)
1 egg
Coffee, ½ cup hot milk, little sugar

Lunch or Supper

Large vegetable salad
1 glass milk
1 slice bread, ½ tablespoon butter
Tea with lemon, little sugar

Dinner

Large serving clear or tomato puree soup
1 medium serving lean meat (no fat)
1 medium serving green beans with milk but no butter
Cabbage or other succulent vegetable, salt
Berries or other fruit (no sugar)

Lunch or Supper

1 poached egg on 1 piece graham toast, ½ tablespoon butter
Large lettuce, cucumber and onion salad
1 glass milk

Dinner

1 large serving clear soup
1 slice roast beef (no fat)
1 large serving turnips, seasoned with salt only
Fresh fruit in season

1600 Calory Diet

Breakfast

4 or 5 prunes
1 medium serving oatmeal, ¼ cup whole milk, little sugar
or
1 slice toast, ½ tablespoon butter
Coffee, ½ cup hot milk, little sugar

Lunch or Supper

Large vegetable salad
Cottage cheese, ½ cup, or American cheese, 1½ ounces, or glass of milk
Bread, 1 slice, ½ tablespoon butter
Tea with lemon, little sugar
1 bran wafer

Dinner

Vegetable or meat stock soup, large serving
Swiss steak, or other meat, medium serving
Raw carrots
Green peas, little milk and salt
Ice-cream

Breakfast

1 orange eaten half hour before rest of meal
1 medium serving whole wheat, ¼ cup milk, little sugar
1 slice graham toast, ½ tablespoon butter
Coffee, ½ cup hot milk, little sugar

Lunch or Supper

Omelet or scrambled egg
Large lettuce and tomato salad, salt and lemon juice
2 bran cookies—glass milk

Dinner

Vegetable stock soup, large serving
2 small slices bacon
Stuffed baked potato, medium serving (little milk, butter and salt)
Carrots, large serving
Sherbet, 1 bran or oatmeal wafer

2000 Calory Diet

Breakfast

1 medium serving cereal, ¼ cup whole milk, little sugar
1 graham muffin, 1 tablespoon butter
1 small serving orange marmalade
Coffee, ½ cup hot milk, little sugar

Breakfast

6 black mission figs
1 slice whole wheat toast, ½ tablespoon butter
1 piece crisp bacon
Coffee, ½ cup hot milk, little sugar

Lunch or Supper

6 to 8 graham crackers and a bowl of milk
Large salad

Dinner

2 small or 1 large meat ball or other meat
Raw cabbage
1 large serving spinach
Lemon milk sherbet (¼ cup milk)
1 bran wafer

Lunch or Supper

Onion or tomato soup
1 baked apple and cream

Dinner

1 medium serving pot roast or other meat with gravy
1 large serving string beans or corn
Large fruit salad

When tomatoes or any of the fresh fruits are used in a salad, the salad should be eaten with a protein meal, not with starches.

Food Friends of the Fat

Here are some of your allies. You can eat liberally of them, have that much-desired full feeling, and still be at ease with the scales. These foods are bulky and furnish comparatively few calories.

2 cupfuls shredded cabbage	40 calories
2 heads lettuce	100 calories
10 stalks asparagus	50 calories
6 radishes	16 calories
1 medium tomato	33 calories
½ cupful spinach	20 calories
1¼ to 1 2-3 cupfuls puffed cereal	100 calories
4 cupfuls bouillon	100 calories
Moderate serving lean meat	100 calories
6-15 oysters (2-3 cupful)	100 calories

And speaking of fattening foods, forget not the extra calories (noted below), which may be added outside of the regular meals, in such attractive forms as candy, sodas, sundaes, soft drinks, etc. These are NOT food friends of the fat.

1 caramel	50 calories
1 piece fudge (½ ounce)	75 calories
1 chocolate-covered almond	13 calories
1 chocolate-covered peppermint	50 calories
1 chocolate cream	35 calories
1 marshmallow	13 calories
1 salted almond	10 calories
1 salted peanut	6 calories
1 milk chocolate	180 calories
1 ounce nut-milk chocolate	190 calories
Ice-cream cone	80-130 calories
Sundaes (without nuts)	225-500 calories
Ice-cream sodas	300-400 calories
1 doughnut	150-250 calories
1 olive	10 calories
1 glass ginger ale	40- 65 calories

Afternoon Tea Risks

How few women realize the amount of energy they stow away when they "drop in for a cup of tea!" Here are some popular combinations taken from a menu-card of a well-known New York tea-room:

Tea biscuits (3 to a portion)	150 calories
Butter (1 pat)	50 calories
Marmalade or Jelly	100 calories
Tea	
Cream (1 tablespoonful) and sugar (2 lumps)	100 calories
Total	400 calories

Chicken and vegetables sandwich	250 calories
Prune whip	100 calories
Tea	
Cream and sugar	100 calories
Total	450 calories

Fruit salad with mayonnaise dressing	300 calories
Tea biscuits (3) with 1 pat butter	200 calories
Chocolate ice-cream	300 calories
Cake	300 calories
Tea	
Cream and sugar	100 calories
Total	1,200 calories

Twelve hundred calories—more than half a day's requirement for a woman leading the average sedentary life—supplied thus in the way of an extra or "light refreshment!"

Don't be a secret eater and diet in public to the discomfort of your hostess, perhaps, and then eat in private.

Maintenance Diet Facts

The tables on the following pages are compiled purposely to show you the number of calories you need in your regular daily diet to sustain normal food requirements.

Calories shown are for a day's ration. To find the number of calories required for each meal divide the total by three if you eat three meals each day.

TABLE No. 1

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does No Work)

Nearest Birthday	If You Do No Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman at Rest Doing No Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
19	5	0	114	51	1275	701	204	370
to	5	1	116	52	1300	715	208	377
20	5	2	119	54	1350	743	216	391
	5	3	122	55	1375	756	220	399
	5	4	125	56	1400	770	224	406
	5	5	129	58	1450	798	232	420
	5	6	133	60	1500	825	240	435
	5	7	137	62	1550	853	248	449
	5	8	141	64	1600	880	256	464
	5	9	145	66	1650	908	264	478
	5	10	149	67	1675	921	268	486
	5	11	153	69	1725	949	276	500
	6	0	158	72	1800	990	288	522
20	5	0	115	52	1300	715	208	377
to	5	1	117	53	1325	729	212	384
21	5	2	120	54	1350	743	216	391
	5	3	123	56	1400	770	224	406
	5	4	126	57	1425	784	228	413
	5	5	130	59	1475	811	236	428
	5	6	134	60	1500	825	240	435
	5	7	138	62	1550	853	248	449
	5	8	142	64	1600	880	256	464
	5	9	146	66	1650	908	264	478
	5	10	150	68	1700	935	272	493
	5	11	154	70	1750	963	280	507
	6	0	159	72	1800	990	288	522
21	5	0	115	52	1300	715	208	377
to	5	1	117	53	1325	729	212	384
23	5	2	120	54	1350	743	216	391
	5	3	123	56	1400	770	224	406
	5	4	127	57	1425	784	228	413
	5	5	131	59	1475	811	236	428
	5	6	135	61	1525	839	244	442
	5	7	139	63	1575	866	252	457
	5	8	143	65	1625	894	260	471
	5	9	147	66	1650	908	264	478
	5	10	151	68	1700	935	272	493
	5	11	155	70	1750	963	280	507
	6	0	160	72	1800	990	288	522

TABLE No. 1—Continued

ACCORDING TO AGE, HEIGHT AND WEIGHT MAINTENANCE DIET OF NORMAL WOMAN

(For One Who Does No Work)

Nearest Birthday	If You Do No Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman at Rest Doing No Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
23	5	0	116	52	1300	715	208	377
to	5	1	118	53	1325	729	212	384
25	5	2	121	55	1375	756	220	399
	5	3	124	56	1400	770	224	406
	5	4	128	58	1450	798	232	420
	5	5	132	60	1500	825	240	435
	5	6	136	62	1550	853	248	449
	5	7	140	63	1575	866	252	457
	5	8	144	65	1625	894	260	471
	5	9	148	67	1675	921	268	486
	5	10	152	69	1725	949	276	500
	5	11	156	71	1775	976	284	515
	6	0	161	73	1825	1004	292	529
25	5	0	117	53	1325	729	212	384
to	5	1	119	54	1350	743	216	391
30	5	2	122	55	1375	756	220	399
	5	3	125	57	1425	784	228	413
	5	4	129	58	1450	798	232	420
	5	5	133	60	1500	825	240	435
	5	6	137	62	1550	853	248	449
	5	7	141	64	1600	880	256	464
	5	8	145	66	1650	908	264	478
	5	9	149	68	1700	935	272	493
	5	10	153	69	1725	949	276	500
	5	11	157	71	1775	976	284	515
	6	0	162	73	1825	1004	292	529
30	5	0	120	54	1350	743	216	391
to	5	1	122	55	1375	756	220	399
35	5	2	125	57	1425	784	228	413
	5	3	128	58	1450	798	232	420
	5	4	131	59	1475	811	236	428
	5	5	135	61	1525	839	244	442
	5	6	139	63	1575	866	252	457
	5	7	143	65	1625	894	260	471
	5	8	147	66	1650	908	264	478
	5	9	151	68	1700	935	272	493
	5	10	155	70	1750	963	280	507
	5	11	159	72	1800	990	288	522
	6	0	164	74	1850	1018	296	536

TABLE No. 1—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does No Work)

Nearest Birthday	If You Do No Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman at Rest Doing No Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
35	5	0	119	54	1350	743	216	391
to	5	1	121	55	1375	756	220	399
40	5	2	124	56	1400	770	224	406
	5	3	127	57	1425	784	228	413
	5	4	130	59	1475	811	236	428
	5	5	134	61	1525	839	244	442
	5	6	138	62	1550	853	248	449
	5	7	142	64	1600	880	256	464
	5	8	146	66	1650	908	264	478
	5	9	150	68	1700	935	272	493
	5	10	154	70	1750	963	280	507
	5	11	158	72	1800	990	288	522
	6	0	163	74	1850	1018	296	536
40	5	0	118	53	1325	729	212	384
to	5	1	120	54	1350	743	216	391
45	5	2	123	56	1400	770	224	406
	5	3	126	57	1425	784	228	413
	5	4	129	58	1450	798	232	420
	5	5	133	60	1500	825	240	435
	5	6	137	62	1550	853	248	449
	5	7	141	64	1600	880	256	464
	5	8	145	66	1650	908	264	478
	5	9	147	67	1675	921	268	486
	5	10	153	69	1725	949	276	500
	5	11	157	71	1775	976	284	515
	6	0	162	73	1825	1004	292	529
45	5	0	117	53	1325	729	212	384
to	5	1	119	54	1350	743	216	391
50	5	2	122	55	1375	756	220	399
	5	3	125	57	1425	784	228	413
	5	4	128	58	1450	798	232	420
	5	5	132	60	1500	825	240	435
	5	6	136	62	1550	853	248	449
	5	7	140	63	1575	866	252	457
	5	8	144	65	1625	894	260	471
	5	9	148	67	1675	921	268	486
	5	10	152	69	1725	949	276	500
	5	11	156	71	1775	976	284	515
	6	0	161	73	1825	1004	292	529

TABLE No. 1—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does No Work)

Nearest Birthday	If You Do No Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman at Rest Doing No Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
50	5	0	116	52	1300	715	208	377
and	5	1	118	53	1325	729	212	384
over	5	2	121	55	1375	756	220	399
	5	3	124	56	1400	770	224	406
	5	4	127	57	1425	784	228	413
	5	5	131	59	1475	811	236	428
	5	6	135	61	1525	839	244	442
	5	7	139	63	1575	866	252	457
	5	8	143	65	1625	894	260	471
	5	9	147	67	1675	921	268	486
	5	10	151	68	1700	935	272	493
	5	11	155	70	1750	963	280	507
	6	0	160	72	1800	990	288	522

TABLE No. 2

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Light Work)

Nearest Birthday	If You Have a Sedentary Occupation or Do Light Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Light Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
19	5	0	114	51	1530	842	245	443
to	5	1	116	52	1560	858	250	452
20	5	2	119	54	1620	891	259	470
	5	3	122	55	1650	908	264	478
	5	4	125	56	1680	924	269	487
	5	5	129	58	1740	957	278	505
	5	6	133	60	1800	990	288	522
	5	7	137	62	1860	1023	297	540
	5	8	141	64	1920	1056	307	557
	5	9	145	66	1980	1089	317	574
	5	10	149	67	2010	1105	322	583
	5	11	153	69	2070	1139	331	600
	6	0	158	72	2160	1188	346	626
20	5	0	115	52	1560	858	250	452
to	5	1	117	53	1590	875	254	461
21	5	2	120	54	1620	891	259	470
	5	3	123	56	1680	924	269	487
	5	4	126	57	1710	941	274	495
	5	5	130	59	1770	974	283	513
	5	6	134	60	1800	990	288	522
	5	7	138	62	1860	1023	297	540
	5	8	142	64	1920	1056	307	557
	5	9	146	66	1980	1089	317	574
	5	10	150	68	2040	1122	326	592
	5	11	154	70	2100	1155	336	609
	6	0	159	72	2160	1188	346	626
21	5	0	115	52	1560	858	250	452
to	5	1	117	53	1590	875	254	461
23	5	2	120	54	1620	891	259	470
	5	3	123	56	1680	924	269	487
	5	4	127	57	1710	941	274	495
	5	5	131	59	1770	974	283	513
	5	6	135	61	1830	1006	293	531
	5	7	139	63	1890	1040	302	548
	5	8	143	65	1950	1072	312	566
	5	9	147	66	1980	1089	317	574
	5	10	151	68	2040	1122	326	592
	5	11	155	70	2100	1155	336	609
	6	0	160	72	2160	1188	346	626

TABLE No. 2—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Light Work)

Nearest Birthday	If You Have a Sedentary Occupation or Do Light Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Light Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
23	5	0	116	52	1560	858	250	452
to	5	1	118	53	1590	875	254	461
25	5	2	121	55	1650	908	264	478
	5	3	124	56	1680	924	269	487
	5	4	128	58	1740	957	278	505
	5	5	132	60	1800	990	288	522
	5	6	136	62	1860	1023	297	540
	5	7	140	63	1890	1040	302	548
	5	8	144	65	1950	1072	312	566
	5	9	148	67	2010	1105	322	583
	5	10	152	69	2070	1139	331	600
	5	11	156	71	2130	1171	341	618
	6	0	161	73	2190	1204	351	635
25	5	0	117	53	1590	875	254	461
to	5	1	119	54	1620	891	259	470
30	5	2	122	55	1650	908	264	478
	5	3	125	57	1710	941	274	495
	5	4	129	58	1740	957	278	505
	5	5	133	60	1800	990	288	522
	5	6	137	62	1860	1023	297	540
	5	7	141	64	1920	1056	307	557
	5	8	145	66	1980	1089	317	574
	5	9	149	68	2040	1122	326	592
	5	10	153	69	2070	1139	331	600
	5	11	157	71	2130	1171	341	618
	6	0	162	73	2190	1204	351	635
30	5	0	120	54	1620	891	259	470
to	5	1	122	55	1650	908	264	478
35	5	2	125	57	1710	941	274	495
	5	3	128	58	1740	957	278	505
	5	4	131	59	1770	974	283	513
	5	5	135	61	1830	1006	293	531
	5	6	139	63	1890	1040	302	548
	5	7	143	65	1950	1072	312	566
	5	8	147	66	1980	1089	317	574
	5	9	151	68	2040	1122	326	592
	5	10	155	70	2100	1155	336	609
	5	11	159	72	2160	1188	346	626
	6	0	164	74	2220	1221	355	644

TABLE No. 2—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Light Work)

Nearest Birthday	If You Have a Sedentary Occupation or Do Light Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Light Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
35	5	0	119	54	1620	891	259	470
to	5	1	121	55	1650	908	264	478
40	5	2	124	56	1680	924	269	487
	5	3	127	57	1710	941	274	495
	5	4	130	59	1770	974	283	513
	5	5	134	61	1830	1006	293	531
	5	6	138	62	1860	1023	297	540
	5	7	142	64	1920	1056	307	557
	5	8	146	66	1980	1089	317	574
	5	9	150	68	2040	1122	326	592
	5	10	154	70	2100	1155	336	609
	5	11	158	72	2160	1188	346	626
	6	0	163	74	2220	1221	355	644
40	5	0	118	53	1590	875	254	461
to	5	1	120	54	1620	891	259	470
45	5	2	123	56	1680	924	269	487
	5	3	126	57	1710	941	274	495
	5	4	129	58	1740	957	278	505
	5	5	133	60	1800	990	288	522
	5	6	137	62	1860	1023	297	540
	5	7	141	64	1920	1056	307	557
	5	8	145	66	1980	1089	317	574
	5	9	147	67	2010	1105	322	583
	5	10	153	69	2070	1139	331	600
	5	11	157	71	2130	1171	341	618
	6	0	162	73	2190	1204	351	635
45	5	0	117	53	1590	875	254	461
to	5	1	119	54	1620	891	259	470
50	5	2	122	55	1650	908	264	478
	5	3	125	57	1710	941	274	495
	5	4	128	58	1740	957	278	505
	5	5	132	60	1800	990	288	522
	5	6	136	62	1860	1023	297	540
	5	7	140	63	1890	1040	302	548
	5	8	144	65	1950	1072	312	566
	5	9	148	67	2010	1105	322	583
	5	10	152	69	2070	1139	331	600
	5	11	156	71	2130	1171	341	618
	6	0	161	73	2190	1204	351	635

TABLE No. 2—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Light Work)

Nearest Birthday	If You Have a Sedentary Occupation or Do Light Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Light Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
50 and over	5	0	116	52	1560	858	250	452
	5	1	118	53	1590	875	254	461
	5	2	121	55	1650	891	259	470
	5	3	124	56	1680	924	269	487
	5	4	127	57	1710	941	274	495
	5	5	131	59	1770	974	283	513
	5	6	135	61	1830	1006	293	531
	5	7	139	63	1890	1040	302	548
	5	8	143	65	1950	1072	312	566
	5	9	147	67	2010	1105	322	583
	5	10	151	68	2040	1122	326	592
	5	11	155	70	2100	1155	336	609
	6	0	160	72	2160	1188	346	626

TABLE No. 3

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Heavy Labor)

Nearest Birthday	If You Do Heavy Labor		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Heavy Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
19	5	0	114	51	1785	982	286	517
to	5	1	116	52	1820	1001	291	528
20	5	2	119	54	1890	1040	302	548
	5	3	122	55	1925	1058	308	559
	5	4	125	56	1960	1078	314	568
	5	5	129	58	2030	1116	325	589
	5	6	133	60	2100	1155	336	609
	5	7	137	62	2170	1194	347	629
	5	8	141	64	2240	1232	358	650
	5	9	145	66	2310	1270	370	670
	5	10	149	67	2345	1290	375	680
	5	11	153	69	2415	1329	386	700
	6	0	158	72	2520	1386	403	731
20	5	0	115	52	1820	1001	291	528
to	5	1	117	53	1855	1020	297	538
21	5	2	120	54	1890	1040	302	548
	5	3	123	56	1960	1078	314	568
	5	4	126	57	1995	1097	319	579
	5	5	130	59	2065	1136	330	599
	5	6	134	60	2100	1155	336	609
	5	7	138	62	2170	1194	347	629
	5	8	142	64	2240	1232	358	650
	5	9	146	66	2310	1270	370	670
	5	10	150	68	2380	1309	381	690
	5	11	154	70	2450	1348	392	710
	6	0	159	72	2520	1386	403	731
21	5	0	115	52	1820	1001	291	528
to	5	1	117	53	1855	1020	297	538
23	5	2	120	54	1890	1040	302	548
	5	3	123	56	1960	1078	314	568
	5	4	127	57	1995	1097	319	579
	5	5	131	59	2065	1136	330	599
	5	6	135	61	2135	1174	342	619
	5	7	139	63	2205	1213	353	639
	5	8	143	65	2275	1251	364	660
	5	9	147	66	2310	1270	370	670
	5	10	151	68	2380	1309	381	690
	5	11	155	70	2450	1348	392	710
	6	0	160	72	2520	1386	403	731

TABLE No. 3—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Heavy Labor)

Nearest Birthday	If You Do Heavy Labor		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Heavy Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
23	5	0	116	52	1820	1001	291	528
to	5	1	118	53	1855	1020	297	538
25	5	2	121	55	1925	1058	308	559
	5	3	124	56	1960	1078	314	568
	5	4	128	58	2030	1116	325	589
	5	5	132	60	2100	1155	336	609
	5	6	136	62	2170	1194	347	629
	5	7	140	63	2205	1213	353	639
	5	8	144	65	2275	1251	364	660
	5	9	148	67	2345	1290	375	680
	5	10	152	69	2415	1329	386	700
	5	11	156	71	2485	1367	397	721
	6	0	161	73	2555	1405	409	741
25	5	0	117	53	1855	1020	297	538
to	5	1	119	54	1890	1040	302	548
30	5	2	122	55	1925	1058	308	559
	5	3	125	57	1995	1097	319	579
	5	4	129	58	2030	1116	325	589
	5	5	133	60	2100	1155	336	609
	5	6	137	62	2170	1194	347	629
	5	7	141	64	2240	1232	358	650
	5	8	145	66	2310	1270	370	670
	5	9	149	68	2380	1309	381	690
	5	10	153	69	2415	1329	386	700
	5	11	157	71	2485	1367	397	721
	6	0	162	73	2555	1405	409	741
30	5	0	120	54	1890	1040	302	548
to	5	1	122	55	1925	1058	308	559
35	5	2	125	57	1995	1097	319	579
	5	3	128	58	2030	1116	325	589
	5	4	131	59	2065	1136	330	599
	5	5	135	61	2135	1174	342	619
	5	6	139	63	2205	1213	353	639
	5	7	143	65	2275	1251	364	660
	5	8	147	66	2310	1270	370	670
	5	9	151	68	2380	1309	381	690
	5	10	155	70	2450	1348	392	710
	5	11	159	72	2520	1386	403	731
	6	0	164	74	2590	1425	414	751

TABLE No. 3—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Heavy Labor)

Nearest Birthday	If You Do Heavy Labor		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Heavy Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
35	5	0	119	54	1890	1040	302	548
to	5	1	121	55	1925	1058	308	559
40	5	2	124	56	1960	1078	314	568
	5	3	127	57	1995	1097	319	579
	5	4	130	59	2065	1136	330	599
	5	5	134	61	2135	1174	342	619
	5	6	138	62	2170	1194	347	629
	5	7	142	64	2240	1232	358	650
	5	8	146	66	2310	1270	370	670
	5	9	150	68	2380	1390	381	690
	5	10	154	70	2450	1348	392	710
	5	11	158	72	2520	1386	403	731
	6	0	163	74	2590	1425	414	751
40	5	0	118	53	1855	1020	297	538
to	5	1	120	54	1890	1040	302	548
45	5	2	123	56	1960	1078	314	568
	5	3	126	57	1995	1097	319	579
	5	4	129	58	2030	1116	325	589
	5	5	133	60	2100	1155	336	609
	5	6	137	62	2170	1194	347	629
	5	7	141	64	2240	1232	358	650
	5	8	145	66	2310	1270	370	670
	5	9	147	67	2345	1290	375	680
	5	10	153	69	2415	1329	386	700
	5	11	157	71	2485	1367	397	721
	6	0	162	73	2555	1405	409	741
45	5	0	117	53	1850	1020	297	538
to	5	1	119	54	1890	1040	302	548
50	5	2	122	55	1925	1058	308	559
	5	3	125	57	1995	1097	319	579
	5	4	128	58	2030	1116	325	589
	5	5	132	60	2100	1155	336	609
	5	6	136	62	2170	1194	347	629
	5	7	140	63	2205	1213	353	639
	5	8	144	65	2275	1251	364	660
	5	9	148	67	2345	1290	375	680
	5	10	152	69	2415	1329	386	700
	5	11	156	71	2485	1367	397	721
	6	0	161	73	2555	1405	409	741

TABLE No. 3—Continued

MAINTENANCE DIET OF NORMAL WOMAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Heavy Labor)

Nearest Birthday	If You Do Heavy Labor		Ideal Weights in Pounds and Kilos		Calories Given Are for a Woman Doing Heavy Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Woman Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
50	5	0	116	52	1820	1001	291	528
and	5	1	118	53	1855	1020	297	538
over	5	2	121	55	1925	1058	308	559
	5	3	124	56	1960	1078	314	569
	5	4	127	57	1995	1097	319	579
	5	5	131	59	2065	1136	330	599
	5	6	135	61	2135	1174	342	619
	5	7	139	63	2205	1213	353	639
	5	8	143	65	2275	1251	364	660
	5	9	147	67	2345	1290	375	680
	5	10	151	68	2380	1309	381	690
	5	11	155	70	2450	1348	392	710
	6	0	160	72	2520	1386	403	731

TABLE No. 1

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does No Work)

Nearest Birthday	If You Do No Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man at Rest Doing No Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
19	5	3	129	58	1450	798	232	420
to	5	4	133	60	1500	825	240	435
20	5	5	137	62	1550	853	248	449
	5	6	141	64	1600	880	256	464
	5	7	145	66	1650	908	264	478
	5	8	150	68	1700	935	272	493
	5	9	155	70	1750	963	280	507
	5	10	160	72	1800	990	288	522
	5	11	166	75	1875	1031	300	544
	6	0	172	78	1950	1073	312	565
	6	1	178	80	2000	1100	320	580
	6	2	184	83	2075	1141	332	602
	6	3	190	85	2125	1169	340	616
20	5	3	130	59	1475	811	236	428
to	5	4	134	61	1525	839	244	442
21	5	5	138	63	1575	866	252	457
	5	6	142	64	1600	880	256	464
	5	7	146	66	1650	908	264	478
	5	8	151	69	1725	949	276	500
	5	9	156	71	1775	976	284	515
	5	10	161	73	1825	1004	292	529
	5	11	167	76	1900	1045	304	551
	6	0	173	78	1950	1073	312	565
	6	1	179	81	2025	1114	324	587
	6	2	186	84	2100	1155	336	609
	6	3	192	87	2175	1196	348	631
21	5	3	132	60	1500	825	240	435
to	5	4	136	62	1550	853	248	449
23	5	5	140	63	1575	866	252	457
	5	6	144	65	1625	894	260	471
	5	7	148	67	1675	921	268	486
	5	8	153	69	1725	949	276	500
	5	9	158	71	1775	976	284	515
	5	10	163	74	1850	1018	296	536
	5	11	169	76	1900	1045	304	551
	6	0	175	79	1975	1086	316	573
	6	1	181	82	2050	1128	328	594
	6	2	188	85	2125	1169	340	616
	6	3	194	88	2200	1210	352	638

TABLE No. 1—Continued

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does No Work)

Nearest Birthday	If You Do No Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man at Rest Doing No Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
23	5	3	133	60	1500	825	240	435
to	5	4	137	62	1550	853	248	449
25	5	5	141	64	1600	880	256	464
	5	6	145	66	1650	908	264	478
	5	7	148	67	1675	921	268	486
	5	8	154	70	1750	963	280	507
	5	9	159	72	1800	990	288	522
	5	10	164	74	1850	1018	296	536
	5	11	170	77	1925	1059	308	558
	6	0	176	80	2000	1100	320	580
	6	1	182	82	2050	1128	328	594
	6	2	189	86	2150	1183	344	623
	6	3	195	88	2200	1210	352	638
25	5	3	135	61	1525	839	244	442
to	5	4	139	63	1575	866	252	457
35	5	5	143	65	1625	894	260	471
	5	6	147	67	1675	921	268	486
	5	7	151	68	1700	935	272	493
	5	8	156	71	1775	976	284	515
	5	9	161	73	1825	1004	292	529
	5	10	166	75	1875	1031	300	544
	5	11	172	78	1950	1073	312	565
	6	0	178	80	2000	1100	320	580
	6	1	184	83	2075	1141	332	602
	6	2	190	87	2175	1196	348	631
	6	3	197	89	2225	1224	356	645
35	5	3	133	60	1500	825	240	435
to	5	4	137	62	1550	853	248	449
40	5	5	141	64	1600	880	256	464
	5	6	145	66	1650	908	264	478
	5	7	149	68	1700	935	272	493
	5	8	154	70	1750	963	280	507
	5	9	159	72	1800	990	288	522
	5	10	164	74	1850	1018	296	536
	5	11	170	77	1925	1059	308	558
	6	0	176	80	2000	1100	320	580
	6	1	179	81	2025	1114	324	587
	6	2	187	85	2125	1169	340	616
	6	3	194	88	2200	1210	352	638

TABLE No. 1—Continued

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does No Work)

Nearest Birthday	If You Do No Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man at Rest Doing No Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
40	5	3	131	59	1475	811	236	428
to	5	4	135	61	1525	839	244	442
45	5	5	139	63	1575	866	252	457
	5	6	143	65	1625	894	260	471
	5	7	147	67	1675	921	268	486
	5	8	152	69	1725	949	276	500
	5	9	157	71	1775	976	284	515
	5	10	162	73	1825	1004	292	529
	5	11	168	76	1900	1045	304	551
	6	0	174	79	1975	1086	316	573
	6	1	177	80	2000	1100	320	580
	6	2	184	83	2075	1141	332	602
	6	3	191	86	2150	1183	344	623
45	5	3	129	58	1450	798	232	420
to	5	4	133	60	1500	825	240	435
50	5	5	137	62	1550	853	248	449
	5	6	141	64	1600	880	256	464
	5	7	145	66	1650	908	264	478
	5	8	150	68	1700	935	272	493
	5	9	155	70	1750	963	280	507
	5	10	160	72	1800	990	288	522
	5	11	165	75	1875	1031	300	544
	6	0	172	78	1950	1073	312	565
	6	1	177	80	2000	1100	320	580
	6	2	182	82	2050	1128	328	594
	6	3	189	86	2150	1183	344	623
50	5	3	128	58	1450	798	232	420
and	5	4	132	60	1500	825	240	435
over	5	5	135	61	1525	839	244	442
	5	6	139	63	1575	866	252	457
	5	7	143	65	1625	894	260	471
	5	8	148	67	1675	921	268	486
	5	9	153	69	1725	949	276	500
	5	10	158	71	1775	976	284	515
	5	11	163	74	1850	1018	296	536
	6	0	169	76	1900	1045	304	551
	6	1	175	79	1975	1086	316	573
	6	2	181	82	2050	1128	328	594
	6	3	187	85	2125	1169	340	616

TABLE No. 2

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Light Work)

Nearest Birthday	If You Have a Sedentary Occupation or Do Light Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man Doing Light Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
19	5	3	129	58	1740	957	278	505
to	5	4	133	60	1800	990	288	522
20	5	5	137	62	1860	1023	297	540
	5	6	141	64	1920	1056	307	557
	5	7	145	66	1980	1089	317	574
	5	8	150	68	2040	1122	326	592
	5	9	155	70	2100	1155	336	609
	5	10	160	72	2160	1188	346	626
	5	11	166	75	2250	1238	360	652
	6	0	172	78	2340	1287	374	679
	6	1	178	80	2400	1320	384	696
	6	2	184	83	2490	1370	398	722
	6	3	190	85	2550	1403	408	739
20	5	3	130	59	1770	974	283	513
to	5	4	134	61	1830	1006	293	531
21	5	5	138	63	1890	1040	302	548
	5	6	142	64	1920	1056	307	557
	5	7	146	66	1980	1089	317	574
	5	8	151	69	2070	1139	331	600
	5	9	156	71	2130	1171	341	618
	5	10	161	73	2190	1204	351	635
	5	11	167	76	2280	1254	365	661
	6	0	173	78	2340	1287	374	679
	6	1	179	81	2430	1337	388	705
	6	2	186	84	2520	1386	403	731
	6	3	192	87	2610	1436	418	756
21	5	3	132	60	1800	990	288	522
to	5	4	136	62	1860	1023	297	540
23	5	5	140	63	1890	1040	302	548
	5	6	144	65	1950	1072	312	566
	5	7	148	67	2010	1105	322	583
	5	8	153	69	2070	1139	331	600
	5	9	158	71	2130	1171	341	618
	5	10	163	74	2220	1221	355	644
	5	11	169	76	2280	1254	365	661
	6	0	175	79	2370	1304	379	687
	6	1	181	82	2460	1353	394	713
	6	2	188	85	2550	1403	408	739
	6	3	194	88	2640	1452	422	766

TABLE No. 2—Continued

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Light Work)

Nearest Birthday	If You Have a Sedentary Occupation or Do Light Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man Doing Light Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
23	5	3	133	60	1800	990	288	522
to	5	4	137	62	1860	1023	297	540
25	5	5	141	64	1920	1056	307	557
	5	6	145	66	1980	1089	317	574
	5	7	148	67	2010	1105	322	583
	5	8	154	70	2100	1155	336	609
	5	9	159	72	2160	1188	346	626
	5	10	164	74	2220	1221	355	644
	5	11	170	77	2310	1270	370	670
	6	0	176	80	2400	1320	384	696
	6	1	182	82	2460	1353	394	713
	6	2	189	86	2580	1419	413	748
	6	3	195	88	2640	1452	422	766
25	5	3	135	61	1830	1006	293	531
to	5	4	139	63	1890	1040	302	548
35	5	5	143	65	1950	1072	312	566
	5	6	147	67	2010	1105	322	583
	5	7	151	68	2040	1122	326	592
	5	8	156	71	2130	1171	341	618
	5	9	161	73	2190	1204	351	635
	5	10	166	75	2250	1238	360	652
	5	11	172	78	2340	1287	374	679
	6	0	178	80	2400	1320	384	696
	6	1	184	83	2490	1370	398	722
	6	2	190	87	2610	1436	418	756
	6	3	197	89	2670	1469	427	774
35	5	3	133	60	1800	990	288	522
to	5	4	137	62	1860	1023	297	540
40	5	5	141	64	1920	1056	307	557
	5	6	145	66	1980	1089	317	574
	5	7	149	68	2040	1122	326	592
	5	8	154	70	2100	1155	336	609
	5	9	159	72	2160	1188	346	626
	5	10	164	74	2220	1221	355	644
	5	11	170	77	2310	1270	370	670
	6	0	176	80	2400	1320	384	696
	6	1	179	81	2430	1337	388	705
	6	2	187	85	2550	1403	408	739
	6	3	194	88	2640	1452	422	766

TABLE No. 2—Continued

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Light Work)

Nearest Birthday	If You Have a Sedentary Occupation or Do Light Work		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man Doing Light Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
40	5	3	131	59	1770	974	283	513
to	5	4	135	61	1830	1006	293	531
45	5	5	139	63	1890	1040	302	548
	5	6	143	65	1950	1072	312	566
	5	7	147	67	2010	1105	322	583
	5	8	152	69	2070	1139	331	600
	5	9	157	71	2130	1171	341	618
	5	10	162	73	2190	1204	351	635
	5	11	168	76	2280	1254	365	661
	6	0	174	79	2370	1304	379	687
	6	1	177	80	2400	1320	384	696
	6	2	184	83	2490	1370	398	722
	6	3	191	86	2580	1419	413	748
45	5	3	129	58	1740	957	278	505
to	5	4	133	60	1800	990	288	522
50	5	5	137	62	1860	1023	297	540
	5	6	141	64	1920	1056	307	557
	5	7	145	66	1980	1089	317	574
	5	8	150	68	2040	1122	326	592
	5	9	155	70	2100	1155	336	609
	5	10	160	72	2160	1188	346	626
	5	11	165	75	2250	1238	360	652
	6	0	172	78	2340	1287	374	679
	6	1	177	80	2400	1320	384	696
	6	2	182	82	2460	1353	394	713
	6	3	189	86	2580	1419	413	748
50	5	3	128	58	1740	957	278	505
and	5	4	132	60	1800	990	288	522
over	5	5	135	61	1830	1006	293	531
	5	6	139	63	1890	1040	302	548
	5	7	143	65	1950	1072	312	566
	5	8	148	67	2010	1105	322	583
	5	9	153	69	2070	1139	331	600
	5	10	158	71	2130	1171	341	618
	5	11	163	74	2220	1221	355	644
	6	0	169	76	2280	1254	365	661
	6	1	175	79	2370	1304	379	687
	6	2	181	82	2460	1353	394	713
	6	3	187	85	2550	1403	408	739

TABLE No. 3

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Heavy Labor)

Nearest Birthday	If You Do Heavy Labor		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man Doing Heavy Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
19	5	3	129	58	2030	1116	325	589
to	5	4	133	60	2100	1155	336	609
20	5	5	137	62	2170	1194	347	629
	5	6	141	64	2240	1232	358	650
	5	7	145	66	2310	1270	370	670
	5	8	150	68	2380	1309	381	690
	5	9	155	70	2450	1348	392	710
	5	10	160	72	2520	1386	403	731
	5	11	166	75	2625	1444	420	761
	6	0	172	78	2730	1502	436	792
	6	1	178	80	2800	1540	448	812
	6	2	184	83	2905	1598	465	842
	6	3	190	85	2975	1636	476	863
20	5	3	130	59	2065	1136	330	599
to	5	4	134	61	2133	1174	342	619
21	5	5	138	63	2205	1213	353	639
	5	6	142	64	2240	1232	358	650
	5	7	146	66	2310	1270	370	670
	5	8	151	69	2415	1329	386	700
	5	9	156	71	2485	1369	397	721
	5	10	161	73	2555	1405	400	741
	5	11	167	76	2660	1463	426	771
	6	0	173	78	2730	1502	436	792
	6	1	179	81	2835	1559	454	822
	6	2	186	84	2940	1617	470	853
	6	3	192	87	3045	1675	487	883
21	5	3	132	60	2100	1155	336	609
to	5	4	136	62	2170	1194	347	629
23	5	5	140	63	2205	1213	353	639
	5	6	144	65	2275	1251	364	660
	5	7	148	67	2345	1290	375	680
	5	8	153	69	2415	1329	386	700
	5	9	158	71	2485	1367	397	721
	5	10	163	74	2590	1425	414	751
	5	11	169	76	2660	1463	426	771
	6	0	175	79	2765	1521	442	802
	6	1	181	82	2870	1579	459	832
	6	2	188	85	2975	1636	476	863
	6	3	194	88	3080	1694	493	893

TABLE No.3—Continued

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Heavy Labor)

Nearest Birthday	If You Do Heavy Labor		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man Doing Heavy Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
23	5	3	133	60	2100	1155	336	609
to	5	4	137	62	2170	1194	347	629
25	5	5	141	64	2240	1232	358	650
	5	6	145	66	2310	1270	370	670
	5	7	148	67	2345	1290	375	680
	5	8	154	70	2450	1348	392	710
	5	9	159	72	2520	1386	403	731
	5	10	164	74	2590	1425	414	751
	5	11	170	77	2695	1482	431	782
	6	0	176	80	2800	1540	448	812
	6	1	182	82	2870	1579	459	832
	6	2	189	86	3010	1656	482	872
	6	3	195	88	3080	1694	493	893
25	5	3	135	61	2135	1174	342	619
to	5	4	139	63	2205	1213	353	639
35	5	5	143	65	2275	1251	364	660
	5	6	147	67	2345	1290	375	680
	5	7	151	68	2380	1309	381	690
	5	8	156	71	2485	1367	397	721
	5	9	161	73	2555	1405	409	741
	5	10	166	75	2625	1444	420	761
	5	11	172	78	2730	1502	436	792
	6	0	178	80	2800	1540	448	812
	6	1	184	83	2905	1598	465	842
	6	2	190	87	3045	1675	487	883
	6	3	197	89	3115	1713	498	904
35	5	3	133	60	2100	1155	336	609
to	5	4	137	62	2170	1194	347	629
40	5	5	141	64	2240	1232	358	650
	5	6	145	66	2310	1270	370	670
	5	7	149	68	2380	1309	381	690
	5	8	154	70	2450	1348	392	710
	5	9	159	72	2520	1386	403	731
	5	10	164	74	2590	1425	414	751
	5	11	170	77	2695	1482	431	782
	6	0	176	80	2800	1540	448	812
	6	1	179	81	2835	1559	454	822
	6	2	187	85	2975	1636	476	863
	6	3	194	88	3080	1694	493	893

TABLE No.3—Continued

MAINTENANCE DIET OF NORMAL MAN ACCORDING TO AGE, HEIGHT AND WEIGHT

(For One Who Does Heavy Labor)

Nearest Birthday	If You Do Heavy Labor		Ideal Weights in Pounds and Kilos		Calories Given Are for a Man Doing Heavy Work	Total Calories, Carbohydrate, Protein and Fat in the Daily Diet		
Age Years	Height Ft.	In.	What a Man Should Weigh Lbs.	Kilos	Calories Required	C.	P.	F.
40	5	3	131	59	2065	1136	330	599
to	5	4	135	61	2135	1174	342	619
45	5	5	139	63	2205	1213	353	639
	5	6	143	65	2275	1251	364	660
	5	7	147	67	2345	1290	375	680
	5	8	152	69	2415	1329	386	700
	5	9	157	71	2485	1367	397	721
	5	10	162	73	2555	1405	409	741
	5	11	168	76	2660	1463	426	771
	6	0	174	79	2765	1521	442	802
	6	1	177	80	2800	1540	448	812
	6	2	184	83	2905	1598	465	842
	6	3	191	86	3010	1656	482	872
45	5	3	129	58	2030	1116	325	589
to	5	4	133	60	2100	1155	336	609
50	5	5	137	62	2170	1194	347	629
	5	6	141	64	2240	1232	358	650
	5	7	145	66	2310	1270	370	670
	5	8	150	68	2380	1309	381	690
	5	9	155	70	2450	1348	392	710
	5	10	160	72	2520	1386	403	731
	5	11	165	75	2625	1444	420	761
	6	0	172	78	2730	1502	436	792
	6	1	177	80	2800	1540	448	812
	6	2	182	82	2870	1579	459	832
	6	3	189	86	3010	1656	482	872
50	5	3	128	58	2030	1116	325	589
and	5	4	132	60	2100	1155	336	609
over	5	5	135	61	2135	1174	342	619
	5	6	139	63	2205	1213	353	639
	5	7	143	65	2275	1251	364	660
	5	8	148	67	2345	1290	375	680
	5	9	153	69	2415	1329	386	700
	5	10	158	71	2485	1367	397	721
	5	11	163	74	2590	1425	414	751
	6	0	169	76	2660	1463	426	771
	6	1	175	79	2765	1521	442	802
	6	2	181	82	2870	1579	459	832
	6	3	187	85	2975	1636	476	863

Chapter VIII

Why Exercise Reduces Weight

When you exercise, the muscular action causes the blood stream to take up stored fat and utilize it as a source of energy. The wastage from this fat is eliminated, through the natural organs, which carry off body wastes, principally through the pores of the skin in the form of perspiration.

The tissues of a stout person are saturated with fat. The tissues will throw off this fat if the body machine requires more energy, as in active exercise. So the generating of heat by the body in exercise and the demand for unusual energy production on the part of the muscles causes the fat to pass from the "stored up" to the "used up" state. It is no longer fat, but waste matter, and is excreted through the usual channels, perspiration, urine and bowels.

An athlete in condition, with practically no fat at all in his tissues, may lose from three to seven or eight pounds of weight in an athletic contest of some duration, like a football game, a wrestling match, a boxing bout, a strenuous game of tennis or other vigorous sports.

If an athlete can lose three to seven, or more, pounds in less than an hour of effort, when he is apparently trained down to skin and bone, how much easier it is to believe that exercise, practiced by a stout person, will cause weight reduction.

So weight reduction, considered in its broadest aspect, is a matter of eating the right amounts and kinds of food, taking sufficient exercise, and *doing both these things regularly and constantly. You must stick to it. Don't quit!*

There are many other methods of weight reduction which are not given extended consideration here, although they are briefly described. But *if a person is sincerely in earnest about reducing weight* a little easy self-control in the matter of eating, and a moderate amount of exercising that need never grow wearisome, will achieve the desired results as quickly as it is safe to take off weight.

The overweight athletic youth takes off weight quickly when preparing for an athletic contest. He does it through rigorous dieting, through strenuous exercising, heavily swathed in thick flannels, and also by massage, all of which helps to increase the amount of bloodflow and the rapidity of the circulation, thereby increasing the amount of waste material taken up by the blood and given off through the usual natural processes.

In the first days of training, an athlete preparing for a grinding contest will often take off three to five, or more, pounds a day, according to his

size and weight. But this is not recommended for the average person who has neither the vitality, the stamina, nor the desire to resort to such heroic measures. The jockey making weight for a race when apparently reduced to nothing but skin and bones will go through what trainers call a "drying out" process to take off a few additional pounds. This is done by going practically without food, entirely without drink, and taking heavy massage after being in the hot room of a turkish bath until no moisture will come from the body. But this is torture. These methods are mentioned to confirm what has been said about food and exercise as the basic methods of weight reduction and to prove the correctness of these statements.

Why You Should Exercise to Reduce

As you will remember, the effect of exercise is to destroy tissue and burn up fat.

The human body is covered with layers of tissue. The body—in extremely stout people—is covered with a layer of fat under the skin. This fat is nature's protection against cold. You will have noticed, for instance, in cold weather, or after swimming in cold water, that your skin feels cold, is cold. Yet under the skin the tissues remain warm. This is largely due to the fatty layer under the skin, which acts as an insulator against cold. The tissues are also streaked with layers of fat, as you will have noticed in buying beef at the butcher shop.

When you exercise this fat furnishes the energy and heat to keep the muscles flexible and resilient. It is "consumed" by the tissues in developing heat and energy.

When you exercise the muscles contract and expand, "breaking up" the cells. The fat is used up and passes away in perspiration, or is absorbed into the blood stream and carried off through the organs.

An athlete will work off several pounds in a hard test of speed and endurance. It is not at all unusual for a man in perfect physical condition, with apparently no surplus weight, to work off five to ten pounds in a comparatively short period of time.

Burning Up Fat

But you are not planning athletic efforts. You are aiming to reduce. Your purpose in exercising is twofold.

Your first purpose is to produce enough muscular effort to create a demand for the energy that is supplied by the fat in and around the tissue cells.

Your second purpose is to accomplish a more active circulation of the blood, which means throwing off waste products by the organs of the body as a result of using the stored up fat to produce energy.

The blood goes through two processes in its journey through the body. It is pumped through the heart and passed through the kidneys, where certain waste products are removed.

Exercise stimulates the heart and causes it to pump the blood faster. After strenuous exercise you will note how much stronger your heart beat is. You will also note that your pulse is faster.

But this rushing around of the blood stream activates all your organs. It stimulates the peristaltic action of your intestines, the action which causes the intestines to keep their contents moving down and outward.

It stimulates the kidneys, aiding them to clear the blood stream of impurities. It stimulates the action of the blood in carrying off waste tissue.

After vigorous exercising you will note a feeling of physical exhilaration all over your body, unless you have overdone it and feel tired. That you should avoid.

Exercising reduces the weight, proper dieting prevents the forming of new fat. And that is the only REAL secret of weight reduction.

How to Exercise for Results

None of the exercises recommended here, and by others, will do you any good unless there is enough muscle action to create a real demand for energy in the tissues, which reduces the fat in these tissues.

So all exercises should be taken with this thought in mind. When you bend, for instance, don't "throw" your body back and forth. That won't help a bit. The right way to do it is as if you were trying to pull a weight down. *Put a tension on your muscles*—all of them—as you bend your body from the waist and try to touch your toes with the tips of your fingers. Exert this tension all over your body, from the tips of your fingers, through your arms, your shoulders, your abdomen, your thighs and calves, down to your feet. You must be actually "pulling" at your muscles, as it were, in flexing your body. *Then the tension and strain on the muscles* by doing work overcoming resistance will require energy forming fat, resulting in weight reduction. This holds true of all exercises. If this tension, this muscular strain, does not exist, then you are not exercising properly and you are wasting so much time. You are not expending the required energy.

It is for this reason that pulley machines are good. They compel you to exert a strain, a muscular effort, and use up energy that can only be obtained from stored up fat.

Exercising is delightful, once you get into the habit of doing it regularly.

Don't overdo it at first. Start with just a few of the simple exercises recommended here. Perhaps only two or three times for each one at first.

But gradually increase to four of each, then to five, six, eight, or more, as you find your ability to master. More effort can be achieved *without strain or tired* feeling.

The group of exercises recommended here are for the average person. You may find them insufficient. If so, add more from the second or advanced list.

The character and scope of the exercises should be governed by your physique and condition. Be governed by the distribution of fat on your body. If the greater mass of fat is around your abdomen and hips the bending and twisting exercises are an absolute necessity, as they will do more to burn out the fatty accumulations on the lining of your stomach.

Exercise in the Open Air

As plenty of oxygen is necessary to burn up fatty tissue, take your exercises before an open window, on a screened porch, or outdoors. Breathe deeply and regularly. Fill your lungs full of oxygen.

It is a good idea to start your exercising with deep breathing. Place your hands on your hips, throw out your chest, hold your chin up and fill your lungs with air. Hold your breath a few seconds to allow the lungs to take up the oxygen in the unaccustomed quantities, then expel the breath and take another good lungful. Repeat this several times. Your body will begin to respond. You will feel the warmth of an increased circulation. The feeling of physical exhilaration will spread over you.

Five minutes of deep breathing every morning before bath or breakfast and as an introduction to your daily exercises, will help immensely. It will make the fat reducing process so much easier.

Then with the fresh morning air all about you, start your exercises. A warm bath or shower, followed by a cold shower—not too cold, but cold enough to set the surface blood tingling—and you will feel like a million. A fast rub with a rough towel, then onto the scales to see what has happened since you weighed yesterday morning. The glad news of the indicator will make you enjoy your breakfast twice as much.

There won't be any of that tired, lazy, worn feeling. You will be ready for a big day of activity.

Swimming to Reduce Weight

Swimming is one of the finest of all exercises, but swimming, like walking, must be done regularly and persevered in. To jump into a tank or in a lake, river or the sea, and swim around, paddling and splashing around for fun, is not going to reduce weight. Start swimming a distance, and as you improve your wind and your endurance, increase the distance every few

days. Start swimming two hundred yards, then increase it to three hundred, four hundred, a quarter of a mile, then a little more, increasing the distance until you are swimming a mile every day. Swim steadily, at an even pace, without sprinting or slowing down, or turning over on your back to paddle and rest. You will be surprised how it will cut down your weight and how it will improve your digestion and elimination.

Swimming is healthful because it brings into play practically all of the muscles of the body. The swimming movement aids the peristaltic movement of the intestines and the action of the water massages the stomach gently with every stroke. Swimming is recommended for chronic stomach sufferers. Marvelous results have been obtained in correcting stomach and intestinal troubles by regular swimming vigorously. The body perspires freely, throwing off the destroyed tissues and crushed fat cells through the sweat glands and pores.

Swimming is also very strongly recommended as a beautifier. Swimmers usually have beautiful, clear, healthy skins. It will also build up the thin and emaciated. Some of the greatest swimmers of the age were thin, scrawny, delicate before taking up swimming. Annette Kellerman, the most famous of all women swimmers, and a woman whose physical perfection is noted, was a delicate and crippled child. Swimming saved her life and gave her that marvelous figure which artists have pronounced the most perfect feminine body of the age. So swimming is a beauty and health builder. If you can't swim, learn—you will always be grateful for this suggestion.

Walking to Reduce Weight

Many phyiscal trainers will recommend walking exercise for reducing weight. By walking exercise is not meant going out for a stroll of a mile or two.

Walking exercise should be done thoroughly, or it won't cut down the poundage very much. First, in walking to reduce you must put on heavy, thick, warm woolens. A heavy suit of woolen underwear, heavy woolen hose, woolen clothes and what the athletes call a "sweat shirt." This is a loose, lightly woven woolen slip-over sweater-like jacket which forms an air-cushion around the body.

Good, stout shoes and a pair of warm gloves complete the costume. Then start walking. Walk briskly, swing your arms, holding the chin high, breathing deeply. Do not slouch along. Do not loiter. Walk steadily at a good brisk pace. Soon you will feel the perspiration starting. That is what will reduce your weight. Keep it up. To do you any good you should walk for at least an hour at a pace that will cover four miles an hour. Walking at that rate will reduce weight and be a great aid to health. The secret of reducing by walking is double. The exercise—which includes swinging of the arms and body in walking—crushes the fat cells between the layers of muscle; secondly,

the heat created by the action causes profuse perspiration, carrying off bodily impurities and crushed fat cells.

The thing to remember is that the walking must be done regularly, briskly, swinging body and arms with the step, and wearing sufficient warm clothing to start the perspiration running. Many people who walk for exercise enjoy having a young dog along for company and as a stimulating influence. A lively dog, like a fox terrier, an airedale, a police dog or a hunting dog—is good company, affords a certain amount of entertainment and induces walking longer. Try it.

Exercise Every Day

In exercising, one thing is important—REGULARITY.

To exercise today, then forget it for a day or two and start over again, doing it intermittently, is worthless. The effect of exercise is cumulative. That is to say, its value increases day by day.

If you only do two of each kind of exercises every day, regularly, it will do you more good than to do ten of each once or twice a week.

Remember to place a strain, or tension, on your muscles in the following group of exercises. Begin with a few of each, then increase the number in a few days and keep on increasing them. Don't tire yourself out. Do what you can comfortably and without strain.

See course of exercises on page 96.

Chapter IX

Taking Off Weight in Spots

If you weigh one hundred fifty two pounds and your normal weight for your age and height is one hundred twenty four pounds, the chances are that you will find one part of your body burdened with both excess weight and oversize measurements.

An analysis of statistical records of overweight people show these excess weights are found deposited over two or more of the lesser active portions of the body. Just why these various parts of the body are the selected goal for fat deposits, little is known, but once the deposit of fat begins, it will continually grow and increase until some check by nature automatically stops it.

The parts that carry this burden of excess weight, often are but a small unit of measurement above the standard for these parts, but, it is these various burdened parts, taken collectively that constitutes the proverbial fat person. There is one type of person that carries an excess of fat around the shoulders, back of neck and upper arm. In another type the waist and abdomen is the depository for surplus fat. Another class of individual is the one loaded down with extra poundage around the hips and thighs, often extending to the calf and ankle.

A recent test of food combinations in relationship to overweight, in which a group of women were the subjects for observation, revealed the fact that in this group each woman was extremely overweight. These overweights ranged from fifteen pounds in the one nearest normal to one hundred thirty-five pounds in the one most abnormal. In each subject the measurements showed excessive fat deposited around specific parts of the body. This entire group desired to reduce weight generally and sixty per cent wanted to reduce fat "spots".

After eight weeks of specified menus and selected exercises there was a general loss of weight for each subject,—approximately fifteen percent of her original weight. Comparative figures showed from ten to fifteen per cent reduction in general measurements. It was noticeable in the entire group that specified menus and exercises were more influential in these reductions than diets or exercises alone. The reductions of both weights and measurements occurred simultaneously.

You may be one of these certain types of fat in spots, and are seeking relief from a tortured self conscience. One or more of these various parts

may appear obnoxious to your eyes—to the eyes of your more fortunate friends they are monstrosities.

Why should you be the one pointed out, talked about and ridiculed because of your unfortunate proportions? Why should you be the one to bear the brunt of sneering remarks when you can be just as symmetrical and have just as attractive a figure as any of your friends?

Every woman is entitled to the form divine—it should be hers by choice and gift. It can be hers—it can be yours. Simple exercises that bring into play certain muscles and ligaments, will prevent fatty deposits from accumulating on and around these heretofore inactive parts.

The exercises that follow, when combined with the right food, will make it possible for you to take off that extra chin, remove surplus flesh at the back of your neck, reduce the size of your arms, shoulders, waist and abdomen. There are simple exercises that will help you cut down the size of your hips, thighs, calf and ankles. They will make it possible for you to remold your body; they will make it possible for you to realize the ideal figure of your dreams.

Vigorous massage of the parts to be reduced, either with hands or roller massager, will be a helpful assistant in breaking down fat tissue of long standing.

Look at yourself in the mirror.

Compare your own measurements with those given below in the symmetry table. You can readily decide on what portions of your body you wish reduced. It is an easy matter for you to take off two to four inches from your hips.

Waist lines reduced with these healthful exercises give you a figure that does away with that straight line effect so repellent to most women.

Symmetry Table

HEIGHT	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
NECK	11	11.2	11.4	11.5	11.7	11.9	12	12.3	12.5	12.7	12.9	13.1	13.3	13.4	13.6	13.8	14.2
UPPER ARM	8.7	8.8	9	9.1	9.3	9.4	9.5	9.7	9.9	10	10 2	10.3	10.5	10.6	10.8	10.9	11.2
FORE ARM	8.7	8.8	9	9.1	9.3	9.4	9.5	9.7	9.9	10	10.2	10.3	10.5	10.6	10.8	10.9	11.2
WRIST	4.4	4.5	4.6	4.7	4.8	4.9	5	5.1	5.2	5.3	5.4	5.6	5.7	5.8	6	6.1	6.2
BUST	31.3	31.8	32.4	32.9	33.4	33.8	34	35	35.6	36.1	36.7	37.2	37.8	38.3	38.8	39.4	40
WAIST	24.9	25.3	25.8	26.2	26.6	27	27.5	27.9	28.3	28.8	29.2	29.6	30.1	30.5	30 9	31.3	32.2
HIPS	31.9	32.4	33	33.5	34.1	35	35.7	36.3	36.8	37.4	37.9	38.5	39	39.6	40.1	40.7	41.2
THIGH	19.1	19.4	19.8	20.1	20.4	21	21.4	21.7	22.1	22.4	22.7	23.1	23.4	23.7	24	24.2	24.7
UPPER LEG	17.9	18.1	18.6	18.9	19.2	19.5	20	20.4	20.7	21	21.3	21.7	22	22.3	22.3	22.6	23.2
KNEE	12.7	12.9	13.2	13.4	13.6	14	14.3	14.5	14.7	14.9	15.1	15.4	15.6	15.8	16	16.2	16.5
CALF	11	11.2	11.4	11.5	11.7	12	12.3	12.5	12.7	12.9	13.1	13.3	13.4	13.6	13.8	14	14.3
ANKLE	6.3	6.4	6.6	6.7	6.8	7	7.1	7.2	7.3	7.4	7.5	7.7	7.8	7.9	8	8.2	8.5

For Slender Hips and Thighs

EXERCISE NO. 1.

Stand erect, your hands on hips. Bend knees until body assumes a squatting position. Repeat five times.

EXERCISE NO. 2.

Assume squatting position as in Exercise No. 1. Keeping knees bent, march forward. Take ten steps.

EXERCISE NO. 3.

From squatting position, bend over and touch the floor with the tips of your fingers. While keeping fingers on the floor, straighten knees. Five times.

EXERCISE NO. 4.

Lie on left side on the floor. Raise right leg sideward and upward as high as you can. Repeat five times, then lay on your right side and do the same with your left leg.

EXERCISE NO. 5.

Stand erect. Hold your right arm until it is even with shoulder and parallel to the floor. Swing your right leg upward and forward until it touches the fingers of outstretched hand. Ten times. Do the same exercise with left arm and leg.

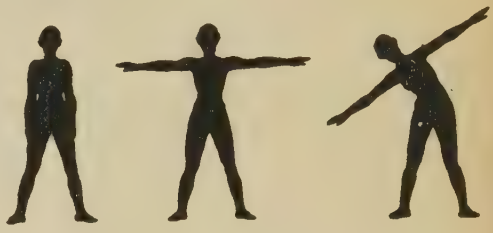
To Reduce Your Waist and Abdomen

EXERCISE NO. 1.

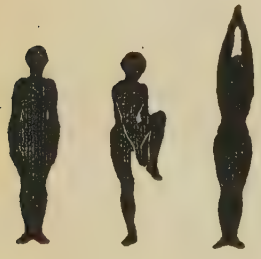
Sit in a chair, without arms. Lift your left leg forward, keeping it stiff to the level of your hips. Keeping your right arm perfectly straight, swing it backwards in a great circle until, by bending your body, you touch the toes of your outstretched leg. Repeat five times. Do the same exercise using your right arm and left leg.

EXERCISE NO. 2.

Stand with feet apart. Raise arms sideward until level with shoulder. Keeping the arm straight, bend trunk sideward to the right as far as possible. Repeat to the left. Perform this exercise ten times bending alternately to the right and to the left.



EXERCISE NO. 3.



Stand erect, arms at side. Raise arms sideward over the head, and clap together. Raise left knee and clap the hands underneath. Lower left knee and clap hands over head. Raise your right knee and clap hands beneath it. Repeat this exercise ten times.

EXERCISE NO. 4.

Lie on your back. Bring right knee up until it touches the chest. Return to original position. Repeat with left knee. Continue this exercise, right and left knees alternately, ten times.

EXERCISE NO. 5.

Sit on floor with your legs straight in front of you. Separate them. Scissor fashion as far as you can, and then bring them together. Ten times.

For a More Shapely Leg and Slender Ankle

EXERCISE NO. 1.

Stand erect, hands on hips. Raise on toes as high as you can. Return to normal position. With weight on heels, lift toes from floor. Twenty times.

EXERCISE NO. 2.

Sit in chair with right knee crossed over your left. Keeping legs still, allowing only the ankle to move, make a complete circle with the toe of the right foot. Repeat ten times. Follow same exercise with left foot.

EXERCISE NO. 3.

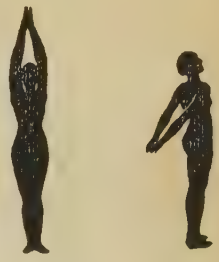
Stand with weight on left foot, right extended slightly, and hop twice. Change so that weight is on the right with left extended, and hop. Hop ten times on each foot.

Exercises for Upper Arm and Shoulder

EXERCISE NO. 1.

Raise left arm forward and upward, and the right arm downward and backward until arms form a straight line. Reverse the position by a forcible swing. Use lower arm moving up, the upper arm moving down. Repeat ten times.

EXERCISE NO. 2.



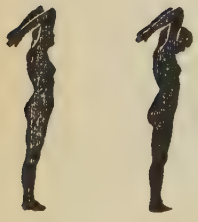
Raise arms sidewards and upwards and clap over head. Swing them downward so that you clap them behind the body.

EXERCISE NO. 3.

Stand with your elbows way back, your clenched fists on your chest. Thrust the left and right arm forward and return alternately, pulling the elbow back as far as possible on the return. Ten times.

To Take Off Fat Back of the Neck

EXERCISE NO. 1.



Clasp hands behind neck. While head resists, pull it forward and downward. Five times.

EXERCISE NO. 2.

Arms folded behind neck. Lower head backward as far as you can. Five times.

EXERCISE NO. 3.

Lay flat on back. While resting weight of body on hips and head, contract the back muscles and raise the back two or three inches from floor or bed.

Removing a Double Chin

EXERCISE NO. 1.

Tense the muscles of your neck and make a complete circle with your head, first twisting it from left to right and then reverse. Five times each way.

EXERCISE NO. 2.

Turn head to left until chin is over shoulder. Bend head backward, slowly turning face toward ceiling. Raise and do same exercise to right. Repeat ten times each way.

EXERCISE NO. 3.

Lie flat on back. Raise head, without lifting shoulders, so that you can see your toes. Ten times.

Chapter X

Building Up Weight

It is doubtful if even the stoutest person is as keenly conscious of physical deficiencies as are the hollow cheeked, gaunt, emaciated thin people. But the cause is usually much different. The fat person becomes too stout from over-indulgence, eating and drinking too much, laziness and carelessness about physical habits.

Thin people, who become thin, are thin because of improper digestion, bad elimination, lack of proper assimilation of food, and disease.

You often see very thin people who eat voraciously, yet cannot put on weight. Eating too much is as bad as not eating enough. It fills the stomach with hard to digest food, overtaxes the digestive organs and instead of building good, rich, red blood, it goes into the intestines in a partially digested condition, where it ferments, poisoning the system.

Careful eating is as essential to the very thin person as to the stout person. Eating heavy combinations of proteins, fats and starches is ruinous to any digestion. Swallowing large quantities of partially masticated foods, and washing them down with copious drafts of water or some other beverage, is bound to be injurious to the human body.

Curiously enough, many of the rules for eating prescribed for stout people apply equally to thin people seeking to build up weight. They are general rules of health and when perfect health is attained the body weight naturally tends to become normal.

Avoid eating starches and proteins in the same meal. Eat slowly, masticating thoroughly so that the food is nearly liquid when swallowed and thoroughly saturated with the digestive ptyalin of the saliva.

Diets to Increase Weight

Of course, fat forming foods, denied to stout people, are prominent in the diet of the thin person. Butter, cream, fat meats, cereals, bacon, ham, the legumes, like beans, peas, lima beans, lentils, fresh corn, are all good flesh builders. The thin person's diet should be aimed to provide fat for the starved fat cells. Sugars in considerable amounts are permissible, *but not to excess.* Honey, maple syrup and natural unrefined sugars are the ones to use.

Sugar is one of the best protein sparers. It also saves the fat stored in the body by providing a ready source of energy, preventing the blood from taking up and the tissues from using the stored fat. Some of the sugar is

also converted into fat. Sugar helps to maintain the alkaline reserve of the blood, thereby increasing the resistance of the body to the poisoning effects of fermenting food in the intestine. This does not mean that it is permissible to load up with candy and other sweets.

Cereals, especially cooked cereals, served with cream, butter and salt are good weight builders. White bread is not recommended. It is a high starch food which is hard to digest and causes acidity.

An acid stomach (hyperacidity) is a result of many stomach ills and is perhaps as universal a cause of emaciation as any one thing. For this reason avoid those sugary and starchy foods which have a tendency toward excessive fermentation.

Fruits should be eaten in abundance. They help digestion, and, after all, correcting thinness is mainly a question of proper digestion and assimilation.

Start your morning with orange juice, grapefruit, or stewed fruit like prunes, figs or dates. The latter can be served with cereals. Broiled bacon or ham, with soft-boiled or coddled eggs, thin slices of partly stale bread toasted until crisp and well buttered, or graham bread or muffins, are all excellent breakfast food for an underweight person, but should not all be taken at the same meal.

Drink a glass of fresh milk. Avoid coffee if possible. If you feel you need its stimulating influence, drink it in moderation. Chocolate is rich in fatty elements and therefore fattening, but you may find it hard to digest. If so, avoid it.

Things to Eat to Grow Plump

At your meals eat meat, fresh vegetables of all kinds, fresh salads, fruit, and vary this with cheese, fish, poultry, egg dishes, whole baked potatoes (eaten skin and all), whole wheat or graham breads, plenty of butter. Drink copiously before eating, but not during meals, and only a glass after meals. Then do not drink while food is in the stomach being digested. This delays and interferes with digestion. It takes an average of three to five hours to digest an ordinary meal. Very heavy meals, of particularly rich foods, will require more time for digestion.

Meat, fish, poultry, game, should be broiled, roasted, baked, boiled or stewed.

Make soups a feature of your big meal of the day. But avoid so-called cream soups, made with a thickening of white flour or cornstarch. Good vegetable and meat soups, or purees of beans, peas or lentils are both satisfying and highly nourishing.

Eat salads frequently, giving the preference to salads of fresh vegetables, lettuce, spinach, celery, cabbage, endive, celery-cabbage, onions, carrots, turnips, etc. In making a French dressing for salads use olive oil, etc., and

lemon or grapefruit juice or a very little vinegar. Mayonnaise or boiled salad dressing made with lemon juice are good and appetizing.

Physicians often recommend for people who have lost weight through illness, drinking a glass of eggnog the last thing at night before going to bed and the first thing in the morning on arising. Make an eggnog by beating up an egg thoroughly, then adding the milk and a little sweetening. A very delightful eggnog is made by beating up an egg with two tablespoons of honey until thoroughly blended, then beating in half a pint of good, rich milk. Cream is too rich, but the milk should be whole milk, not skimmed milk, nor bottle milk from which the cream has been removed.

Try a glass of this eggnog the last thing every night, and a glass every morning on arising. You will be surprised at the results.

Some people cannot take eggnog. Eggs do not agree with them. For these, half a wineglass of olive oil (the best, which is called "virgin" oil) in which a raw egg has been dropped, is recommended. This is not very palatable at first, unless you have learned to like the taste of olive oil, but it is a wonderful stomach conditioner, acts as a lubricant to the bowels and furnishes excellent nutriment.

It is a matter of fact that people in the South of Europe, Italy, Spain, Portugal and Greece—the countries where olive oil is used in practically all cooking and in salads, have marvelous complexions. This is attributed to the quantities of olive oil taken every day.

Butter Is of Highest Food Value

Eat plenty of butter. Butter has the highest food value of anything the markets provide. It is easily digested raw, but not so easy to digest when cooked. The French chefs use butter prodigiously in cooking. It makes delicious sauces, but it is hard to digest in this form. Select good, fresh butter. Such butter is a splendid health and vigor builder and perhaps the most delicious way to take fats.

Use fresh vegetables when you can get them. During the winter months it is sometimes hard to get much variety, but our modern methods of refrigerated shipping now makes it possible to get fresh vegetables practically all the year round. The fresher vegetables are the better, because keeping them too long causes hardening of the cellulose matter in the vegetables and sometimes makes them hard to digest. They also lose some of their vitamin content in storage. Canned vegetables are better than no vegetables at all, and in fact are better than vegetables which have been stored for any length of time. Modern canning methods cause very little loss in vitamin content.

Eat Salads of Raw Vegetables

Vegetable salads are always best, but to vary the menu fruit salads can be substituted when desired. But even when serving fruit salads let lettuce

be part of the salad. Lettuce is one of the best of all vegetable salad ingredients and affords many necessary elements to the body.

For the sake of digestion avoid eating starchy foods and high protein foods in the same meal. Also avoid eating two heavy starchy dishes in the same meal. The starches, as explained before, should be eaten in a meal by themselves.

In cooking vegetables remember this. The majority of the mineral salts found in vegetables and fruits are found in or under the skin. In boiling vegetables, boil them whole, or if you peel them before boiling, save the boiling water for making a sauce for the vegetables. In this way you save the valuable elements which most cooks throw away in the water in which vegetables have been cooked. Careful housekeepers save the water in which vegetables have been boiled to use as a "stock" in making soups and sauces

Do not overeat to try to gain weight!

Increase Your Weight Scientifically

Adding weight is just the reverse of taking off weight. Consult Page 35. Learn what your normal "calory intake" is. Ever keeping in mind the necessity of balancing your diet, formulate for yourself menus having an increased number of calories. If daily weighing on the Health-O-Meter fails to show that you are increasing, increase your "calory intake" until it shows a weekly gain.

While it is easy to take off ½ pound daily, putting on ½ pound daily is much harder. Persistence is the price you may have to pay for a gain in weight. If you show a weekly gain of 1 pound, feel satisfied. Think what that would mean in a year.

Foods That Make Calories

By a judicious choice from the following list of foods it is easy to add many calories to a meal.

1 tablespoonful butter	100 calories
4 small slices bacon (cooked)	100 calories
1 tablespoonful thick cream	50 calories
1 tablespoonful oil	100 calories
1 cupful cocoa (made with milk)	600 calories
1 glassful (1 cupful) milk	170 calories
1 cupful cream of vegetable soup	200 calories
1 tablespoonful mayonnaise	100 calories
1½ tablespoonful French dressing	100 calories
1 tablespoonful hard sauce	100 calories
2 tablespoonfuls sugar	100 calories
1 medium potato	100 calories
1 slice bread (½ inch thick)	50 calories
1 cupful malted milk	230 calories

Chapter XI

Your Correct Weight Once Regained Should Be Maintained

Many who read this book need not bother to add or take off weight as they, fortunately, weigh approximately what they should. These lucky ones should not rest. With the aid of a Health-O-Meter, they should ascertain how many calories a day they need to maintain their weight. The information on Page 35 gives a clue; a little experimenting with a Health-O-Meter will give the definite information.

After learning what your "calory intake" should be, build your menus around that figure, meanwhile watching your weight daily. If it shows that that diet enables you to maintain your weight at the right figure, continue it. If it proves insufficient, increase the number of calories. Learn what your "calory intake" should be as soon as possible. A week with the Health-O-Meter will reveal it to you.

If you have had to take off or put on weight, you undoubtedly know what your daily requirements are. Build your diet around that figure. Weigh daily on a Health-O-Meter to see that you have not begun to relapse into your old condition. Weighing daily, as we have said before, is more than watching your weight—it is watching your health.

Your Health-O-Meter Is a Health Barometer

Hundreds of thinking men and women watch their Health-O-Meter automatic bathroom scales each morning with the same keen interest a Wall Street broker bestows on the stock ticker.

They know they are watching a "health barometer" when they watch their weight on a Health-O-Meter. With infallible accuracy, it tells them if they are in good physical condition, and warns them of approaching ill health in time to take precautions.

The intimate relation between weight and health makes the Health-O-Meter a "health barometer."

Under ordinary health conditions, your weight should remain fairly uniform from week to week. If there are any excessive gains or losses, the chances are that there is something fundamentally the matter with you.

If your Health-O-Meter shows you are putting on weight, the following week will find you sluggish, prone to digestive disorders, headaches, dullness, unless you take precautions.

Don't allow yourself to become overweight! It is generally the beginning of physical deterioration, gout, anemia, heart trouble.

If over-eating or under-exercising does not explain your tendency to put on weight, have your doctor examine you.

"A stitch in times saves nine"—seeing a doctor early counts for much in the game of keeping well.

On the other hand, if your scales show you to be below your normal weight, don't rejoice.

Underweight has its dangers. It leads to nervousness, lack of vigor, anemia, lowered resistance to disease, tuberculosis.

If you are losing weight daily, next week will find you fidgety, nervous, easily tired, short tempered.

Maybe a cold, overwork, nervousness, worry or indigestion may cause this loss of weight. Whatever the cause, remedy it.

If you cannot ascertain the cause, consult your physician. Giving him your weight records for the past two weeks will aid him in making his diagnosis.

Weigh daily! Note whether there are any variations in your weight from day to day. Find out why! Remedy the causes.

Follow this program and you will be remarkably free from illness because you will nip most sicknesses in the bud.

Watching a Health-O-Meter for signs of weight variations will give you advance warnings of approaching sickness in time for you to take precautions.

Chapter XII

Protect the Children's Health

If you were to hear of a parent deliberately starving a child, you would naturally be indignant and demand that such an unnatural parent be punished to the full extent of the law. Yet there are millions of parents today who are starving their children, unknowingly. Through their ignorance, their little ones are suffering from malnutrition.

Ill Effects of Malnutrition

You see the victims of malnutrition among adults at every hand. You see "runty" men and women, handicapped mentally and physically, undersize and underweight, sickly and weakly, because during childhood they suffered from malnutrition. What is to blame? Parental ignorance.

Just as the weaklings of today were the undernourished children of yesterday, the children suffering from malnutrition today will be the weaklings of tomorrow.

Statistical observations in public schools show that millions of children are undernourished. The majority of these children come from the homes of parents in comfortable circumstances.

Causes of Malnutrition

Malnutrition is rarely caused by not getting enough to eat, but by not getting the proper combination of nutritive elements that build body, blood, brain, bone.

The millions of parents who are starving their children are starving them because of their unfamiliarity with the food requirements of growing children—and because they do not know whether or not their children are growing at the right weight.

Do you know what your child should weigh? Is his weight right? How fast should he grow? Is his increase in weight normal?

Those questions can only be correctly answered if you weigh your child daily and regulate his diet by what the scales reveal.

Schools Attacking Problem

In hundreds of schools, pupils are weighed regularly. Their weights are recorded and compared. Cases of malnutrition are uncovered. In one large city it was found that over half the pupils were suffering from malnutrition.

The schools are attacking this condition because of the effect that malnutrition will have on the future of the growing children as well as on their immediate mental development.

Start Weighing Your Children Every Day

The Weight Tables herein show you what your children should weigh for their age and height. It shows what they should weigh as they grow in stature. How do your children's weights coincide with these approved weights?

For the sake of your children, you should have a Health-O-Meter automatic scale in your bathroom and weigh your children daily.

This splendid practice will not only tell you whether or not they are suffering from malnutrition but it will give you advance warnings of internal conditions that may seriously affect your children.

It can give you the first warnings that malnutrition is affecting your children. It can tell you to watch your children's diet and health habits. It can tell you whether those enlarged tonsils are producing pus which your children are absorbing.

Yes, and your Health-O-Meter can tell you that little Johnny has not recovered from his last bad cold, or that he is sick and should be taken to the doctor.

Watching his weight on a Health-O-Meter will keep you from being too late and allows the doctor to get the case in time and save weeks, perhaps months, of anxiety while treating a condition that taken early would respond quickly because no extensive damage had yet been done.

Watching your child's weight daily on a Health-O-Meter may mean the difference between a strong, healthy, vigorous boy or girl, and one that is sickly and destined to go through life a weakling.

See weight tables on next page.

Average Weights for BOYS From 5 to 18 Years

Ht. In.	Av. Wt. for Ht. Lbs.	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years
38	33	33	33												
39	34	34	34												
40	36	36	36	36											
41	37	37	37	37											
42	39	39	39	39											
43	41	41	41	41	41										
44	42	42	42	42	42										
45	45	45	45	45	45	45									
46	47	47	47	47	48	48									
47	50	49	50	50	50	50	50								
48	52	---	52	52	52	52	53	53							
49	55	---	54	54	55	55	56	56							
50	58	---	56	56	57	58	59	61	62						
51	61	---	---	59	60	61	61	63	65						
52	64	---	---	63	64	64	64	65	67						
53	68	---	---	66	67	67	68	68	69	71					
54	71	---	---	---	69	70	70	71	71	73					
55	75	---	---	---	72	74	74	74	75	77	78				
56	79	---	---	---	---	76	78	78	79	81	83				
57	84	---	---	---	---	80	82	82	82	84	88	92			
58	89	---	---	---	---	---	84	86	86	88	93	96	101		
59	95	---	---	---	---	---	87	90	90	92	96	100	103	104	
60	101	---	---	---	---	---	91	95	95	97	101	105	108	109	111
61	108	---	---	---	---	---	---	99	100	101	105	108	112	113	116
62	114	---	---	---	---	---	---	104	105	106	109	113	115	117	118
63	118	---	---	---	---	---	---	---	110	110	112	116	117	119	120
64	121	---	---	---	---	---	---	---	114	115	117	119	120	122	123
65	125	---	---	---	---	---	---	---	118	120	121	122	123	125	126
66	129	---	---	---	---	---	---	---	---	124	124	125	128	129	130
67	133	---	---	---	---	---	---	---	---	128	130	131	133	133	135
68	138	---	---	---	---	---	---	---	---	131	133	135	136	138	138
69	142	---	---	---	---	---	---	---	---	---	135	137	138	140	142
70	144	---	---	---	---	---	---	---	---	---	136	138	140	142	144
71	145	---	---	---	---	---	---	---	---	---	138	140	142	144	145

Average Weights for GIRLS From 5 to 19 Years

Ht. Ins.	Av. Wt. for Ht. Lbs.	5 years	6 years	7 years	8 years	9 years	10 years	11 years	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years
38	34	34	34													
39	35	35	35													
40	36	36	36													
41	38	38	38	38												
42	39	39	39	39	39											
43	41	41	41	41	41											
44	44	44	44	44	44											
45	46	46	46	46	46	46	46									
46	48	47	48	48	48	48	48									
47	50	49	50	50	50	50	50	50								
48	53	---	52	53	53	53	53	53								
49	55	---	55	55	55	55	55	55	55							
50	58	---	57	58	58	58	58	58	58	58						
51	61	---	---	61	61	61	61	61	61	61						
52	64	---	---	63	64	64	64	64	64	64	64					
53	68	---	---	66	67	67	67	67	67	68	68					
54	71	---	---	---	70	70	70	70	70	71	71	72				
55	74	---	---	---	72	72	73	73	74	74	74	74				
56	78	---	---	---	75	76	77	77	77	78	78	78	80			
57	82	---	---	---	---	79	80	81	81	82	83	83				
58	85	---	---	---	---	83	84	84	85	85	86	87				
59	89	---	---	---	---	---	87	88	89	89	90	90	90			
60	94	---	---	---	---	---	91	92	92	93	94	95	96			
61	99	---	---	---	---	---	---	95	96	97	99	100	103	106		
62	104	---	---	---	---	---	---	100	101	102	103	104	107	111	116	
63	111	---	---	---	---	---	---	105	106	107	108	110	113	118	123	127
64	117	---	---	---	---	---	---	---	109	111	113	115	117	121	126	130
65	123	---	---	---	---	---	---	---	114	117	118	120	122	127	131	134
66	129	---	---	---	---	---	---	---	---	119	122	125	128	132	136	139
67	133	---	---	---	---	---	---	---	---	124	128	130	134	136	139	142
68	139	---	---	---	---	---	---	---	---	---	134	134	137	141	143	147
69	144	---	---	---	---	---	---	---	---	---	137	139	143	146	149	152
70	147	---	---	---	---	---	---	---	---	---	143	144	145	148	151	155
71	152	---	---	---	---	---	---	---	---	---	148	150	151	152	154	159
72	157	---	---	---	---	---	---	---	---	---	---	153	155	156	158	163
73	163	---	---	---	---	---	---	---	---	---	---	157	160	162	164	167
74	169	---	---	---	---	---	---	---	---	---	---	160	164	168	170	171

Get the Utmost Out of Your Health-O-Meter

I. Compare your actual "bathside" weight with your correct weight as given in the table in Chapter I.

II. If this comparison shows you to be above or below your normal weight, follow the Weight Control Method outlined in Chapters III to IX.

III. If your weight is approximately correct, maintain it by weighing daily on a Health-O-Meter and following the dietary suggestions in Chapters III to IX.

IV. Weight daily—interpret the variations in your daily weight according to Chapter X—take precautions if necessary.

V. Weigh your children regularly on a Health-O-Meter and compare their weights with those in Chapter XII.

REFERENCE TABLES

THINK before you Eat!

To increase your weight, generally speaking, determine your average "calory intake," then increase this amount. To lose weight, reverse the procedure and reduce the amount.

TABLE OF 100 CALORY PORTIONS OF COMMON FOODS

Food	Measure	Weight in Ounces
Cereals, breads, crackers		
Cornflakes	1¼ cupful	1.
Corn-meal, cooked	⅔ cupful	6.
Corn-starch	3 tablespoonfuls	1.
Farina, cooked	¾ cupful	6.
Flour, white	4 tablespoonfuls	1.
Flour, graham	3 tablespoonfuls	1.
Flour, entire wheat	3 tablespoonfuls	1.
Hominy grits, cooked	4-5 cupful	6.8
Oatmeal, cooked	1 cupful	7.9
Puffed corn	1¼ cupful	1.
Puffed rice	1⅓ cupful	1.
Puffed wheat	1⅔ cupful	1.
Rice, steamed	¾ cupful	4.
Tapioca	3 tablespoonfuls	1.
Bread, brown	¾ in. slice, 3 in. diameter	1.8
Bread, graham	3 slices, ⅜ in. x 2½ in. x 2¾ in.	1.4
Bread, white	2 slices, ½ in. x 3 in. x 3½ in.	1.3
Bread, whole wheat	2 slices, ½ in. x 3 in. x 3½ in.	1.4
Crackers, graham	2	.8
Crackers, saltines	6	.8
Crackers, soda	4	.9
Griddle-cakes	1 cake, 4½ in. diameter	1.8
Macaroni, cooked	1 cupful	5.2
Macaroni, tomato sauce	5 tablespoonfuls	3.6
Zwieback	3 pieces, 3¼ in. x ½ in. x 1¼ in.	.8
Fruits		
Dried		
Apples	½ cupful	1.2
Apricots	9 halves	1.3
Currants	¼ cupful	1.1
Dates	4½ dates	1.1
Figs	1½ large fig	1.1
Prunes	4 medium prunes	1.4
Raisins	¼ cupful	1.1
Fresh		
Apples	1 large apple	7.5
Bananas	1 large banana	5.5

TABLE OF 100 CALORY PORTIONS OF COMMON FOODS (Continued)

Food	Measure	Weight in Ounces
Blackberries	½ cupful (50 berries)	6.1
Cherries, stoned	1 cupful	4.5
Cranberries, fresh	2 cupfuls	7.6
Cranberry sauce	¼ cupful (scant)	1.5
Currants	1½ cupful	6.2
Grapes, Concord	1 large bunch	4.9
Grapes, Malaga	22 grapes	3.7
Grape-juice	½ cupful	3.5
Huckleberries	1 cupful	4.7
Lemons	3 large lemons	11.4
Muskmelon	1 medium-sized	18.
Olives, green	6-8	1.6
Olives, ripe	6-8	1.7
Oranges	1 large orange	9.5
Orange-juice	1 cupful	8.2
Peaches, fresh	3 medium-sized	10.5
Peaches, canned	2 halves with 3 tablespoonfuls juice	7.5
Pears	1 large pear	6.3
Pineapple, fresh	2 slices, 1 in. thick	8.2
Pineapple, canned	1 slice with 3 tablespoonfuls juice or ¼ cupful shredded	2.3
Plums	3-4 large plums	4.4
Raspberries	1⅛ cupful	5.3
Rhubarb, fresh	4 cupfuls, cut in small pieces	15.3
Rhubard, stewed	½ cupful	1.7
Strawberries	1⅓ cupful	9.
Watermelon (edible part)		11.7
Vegetables		
Asparagus	20 stalks, 8 in. long	15.9
Beans, Lima, fresh, shelled	½ cupful	2.9
Beans, Lima, buttered	¼ cupful	1.7
Beans, Lima, dried	2 tablespoonfuls	1.
Beans, string	2¼ cupfuls, cut in pieces	8.5
Beans, white, dried	2 tablespoonfuls	1.
Beets	4 beets, 2 in. diameter or 1⅓ cupful, sliced	7.7
Cabbage	5 cupfuls, shredded	11.2
Carrots	4-5 young carrots, 3-4 in. long	10.1
Cauliflower	1 small head	11.5
Celery	4 cupfuls, cut in pieces	19.1
Corn on cob	2 ears, 6 in. long	9.
Corn, canned	⅓ cupful	3.6
Cucumbers	2½ cucumbers, 7 in. long	23.5
Lentils, dried	2½ tablespoonfuls	1.
Lettuce	2 large heads	18.5
Mushrooms	22 mushrooms, 1 in. diameter	7.9
Onions	3-4 medium	7.2
Parsnips	2 medium	7.
Peas, canned	¾ cupful	4.4
Peas, fresh	¾ cupful, shelled	3.5
Potatoes, sweet, baked	½ medium	3.
Potatoes, white, baked	1 medium	3.
Potatoes, white, boiled	1 medium	3.6
Potatoes, white, mashed	½ cupful (scant)	3.1
Potatoes. white, chipped	8-10 large pieces	.6

TABLE OF 100 CALORY PORTIONS OF COMMON FOODS (Continued)

Food	Measure	Weight in Ounces
Radishes	36 small radishes	12.
Spinach, cooked and chopped	2½ cupfuls	21.
Tomatoes, fresh	2-3 medium	15.5
Tomatoes, canned	1¾ cupful	15.6
Turnips, raw	2 cupfuls (cut in cubes)	9.
Turnips, creamed	½ cupful	1.4
Dairy products, fats, eggs, etc.		
Bacon fat	1 tablespoonful	.4
Beef drippings	1 tablespoonful	.4
Butter	1 tablespoonful (scant)	.5
Buttermilk	1⅛ cupful	10.
Cheese		
American	1⅛ in. cube	.8
Cottage	5½ tablespoonfuls	3.2
Cream	piece, 2 in. x 1 in. x ⅜ in.	.9
Swiss	1½ in. cube	.8
Cream, thin, 18 per cent	¼ cupful	1.8
Cream, thick, 40 per cent	1⅓ tablespoonful	.9
Cream, whipped	2 tablespoonfuls	.9
Eggs, in shell	1⅛ egg	2.7
Lard	1 tablespoonful	.4
Milk		
Condensed	1½ tablespoonfuls	1.1
Evaporated	3¾ tablespoonfuls	2.1
Powdered, whole		.8
Powdered, skimmed		1.1
Whole	⅝ cupful	5.1
Oils		
Cottonseed	1 tablespoonful	.4
Oleomargarin	1 tablespoonful	.5
Olive-oil	1 tablespoonful	.4
Meat		
Beef, corned and boiled	slice 4½ in. x 1½ in. x 5-6 in.	3.
Beef, dried	4 thin slices, 4 in. x 5 in.	2.
Beef, Hamburg steak	1 cake, 2½ in. diameter x ⅞ in. thick	2.
Beef, rib roasted	slice, 5 in. x 2½ in. x ¼ in.	1.6
Beef, round, broiled	slice, 4 in. x 3 in. x 1⅛ in.	2.
Beef, sirloin, steak, lean broiled	slice, 2 in. x 1½ in. x ¾ in.	2.
Beef, sirloin steak, medium fat broiled	slice, 1¾ in. x 1½ in. x ¾ in.	1.3
Chicken, broiled	slice, 4 in. x 2½ in. x ⅛ in.	2.6
Chicken, roast	slice, 4 in. x 2½ in. x ¼ in.	1.7
Frankfurters	1 frankfurter, 4½ in. long	1.1
Lamb-chops	1 chop. 2 in. x 2 in. x ½ in.	1.6
Liver	slice, 2 in. x 2¾ in. x ⅛ in.	2.1
Mutton, roasted	slice, 3 in. x 3¾ in. x ⅛ in.	1.2
Pork, bacon, fried	4-5 small slices	.5
Pork, ham, boiled	slice, 4¾ in. x 4 in. x ⅛ in.	1.3
Pork sausage, fried	1⅔ sausage, 3 in. x ¾ in.	1.1
Turkey, roasted	slice, 4 in. x 2½ in. x ⅛ in.	1.3
Veal	slice, 2 in. x 2¾ in. x ⅛ in.	2.3
Fish		
Bluefish	piece, 3 in. x 3 in. x ½ in.	2.4
Clams, raw	6 clams or ½ cupful	7.6
Halibut steak, broiled	piece, 3 in. x 2¼ in. x 1 in.	3

TABLE OF 100 CALORY PORTIONS OF COMMON FOODS (Continued)

Food	Measure	Weight in Ounces
Mackerel, Spanish, broiled	piece, 3 in. x 2¼ in. x 1 in.	2.6
Oysters, raw	6-12 oysters, ⅔ cupful	7.2
Salmon, canned	½ cupful	1.8
Sardines, canned	3-6 sardines	1.7
Scallops, raw	¾ cupful	4.8
Shrimps, raw	½ cupful	3.2
Tunny fish, canned	½ cupful	2.8
Nuts		
Almonds	12-15	.5
Brazil nuts	2	.5
Butternuts	4-5	.5
Cocoanut,	1-5 cupful	.6
Chestnuts, Italian	7	1.5
Filberts	8-10	.5
Hickory-nuts	15-16	.5
Peanuts	20-24 single	.6
Peanut butter	2½ teaspoonfuls	.6
Pecans	12 single	.5
Pine-nuts	¼ cupful	.6
Walnuts, English	8-16	.5
Chocolates, sweets, etc.		
Cherries, candied	10	1.
Chocolate		
Milk, sweetened	piece, 2¼ in. x 1 in. x ⅛ in.	.7
Milk, unsweetened	piece, ¾ in. x 1¼ in. x ⅞ in.	.6
Cocoa	3½ tablespoonfuls	.7
Corn-sirup	1¾ tablespoonful	1.5
Honey	1 tablespoonful	1.1
Maple-sirup	1½ tablespoonful	1.2
Molasses	1½ tablespoonful	1.2
Sugars		
Brown	2 tablespoonfuls	.9
Granulated	2 tablespoonfuls (scant)	.9
Loaf	3½ lumps (full size)	.9
Powdered	2 tablespoonfuls	.9
Miscellaneous		
Cocoa (made with milk)	2-5 cupful	3.8
Macaroni and cheese	½ cupful	2.1
Ice-cream (made with thin cream)	¼ cupful	2.
Sponge-cake	piece, 1½ in. x 1½ in. x 2 in.	.9
Apple, baked with 2 teaspoonfuls sugar	½ large apple	2.3
Salad dressings		
Boiled	¼ cupful	2.8
French	1½ tablespoonful	.6
Mayonnaise	1 tablespoonful	.5
White sauce	¼ cupful	2.4
Pies		
Apple	sector 1½ in. at circumference*	1.6
Custard	sector 2 in. at circumference*	1.9
Lemon meringue	sector 1 in. at circumference*	1.
Mince	sector 1 in. at circumference*	1.2

* Pie 9 inches in diameter.

Calculations from "Feeding the Family" and "Handbook for Dietetics," by Rose.

Eddy's Vitamin Tables

Below will be found Eddy's Vitamin Tables showing the distribution of these essential elements in our common foods. In these tables the letter x represents a very small proportion; xx a larger percentage; xxx still larger; xxxx the maximum quantity; 0 none; ? possibly small percentage;—(blank) not known as yet.

MEATS

	A	B	C
Beef hearts	x	x	?
Brains	xx	xxx	x?
Cod fish	x	x	?
Herring	xx	xx	?
Horse Meat	x	x	?
Kidney	xx	xx	?
Lean Muscle	0	0	x?
Liver	x	x	x?
Pancreas	x	xxx	?
Pig hearts	x	x	x?
Thymus	0	0	0?
Fish roe	x	xx	?

CEREALS

	A	B	C
Barley	x	xxx	?
Bread, white	....	x?	....
Whl. Wht. Brd.	x	xxx	?
Corn yellow	x	xxx	?
Oats	x	xxx	0
Polished rice	0	0	0
Rye	x	xxx	0
Corn embryo	....	xxx	....
Malt extract	0	0	0
Wheat bran	0	x	0
Endosperm	0	0	0
Kernel	x	xxx	0

FRUITS

	A	B	C
Apples	....	xx	xx
Bananas	?	x	xx
Grape fruit	....	xxx	xxx
Grape juice	?	x	x
Lemons	....	xxx	xxxx
Oranges	....	xxx	xxxx
Pears	....	xx	xx
Raisins	....	x	x
Tomatoes	xx	xxx	xxxx
Limes	....	xx	xx

DAIRY PRODUCTS

	A	B	C
Skim-milk powder	x	xxx	x?
Cheese	xx	x	?
Whole-milk powder	xxx	xxx	x?
Condensed milk	xx	x	0
Butter	xxxx	0	0
Cream	xxx	x	?
Whey	x	xxx	x
Whole milk	xxx	xxx	xx

VEGETABLES

	A	B	C
Cabbage	xxx	xxx	xxxx
Carrots	xxx	xxx	xx
Cauliflower	xx	xxx	xx
Celery	?	xxx	?
Lettuce	xx	xx	xxxx
Rutabagas	....	xxx	....
Onions	?	xxx	xxx
Parsnips	xx	xxx	....
Peas	x	xx	xxx
Potatoes, sweet	0	xx	xx
Potatoes	0	xx	?
Spinach	xxx	xxx	xxx

SEEDS

	A	B	C
Beans kidney	....	xxx	....
Beans navy	....	xxx	....
Beans soy	x	xxx	0
Cotton seed	xx	xxx	....
Flax seed	xx	xxx	....
Hemp seed	xx	xxx	....
Millet seed	xx	xxx	....
Peanuts	x	xx	....
Peas dry	x?	xx	0
Sun Flr. seed	x	....	....

EDDY'S VITAMIN TABLES—Continued

FATS AND OILS

	A	B	C
Beef fat	x	0	0
Butter	xxxx	0	0
Cocoanut oil	0	0	0
Codliver oil	xxxx	0	0
Corn oil	0	0	0
Cotton seed oil	0?	0	0
Egg yolk fat	xxxx	0	0
Fish oils	xx	0	0
Lard	0?	0	0
Oleo animal	x	0	0
Oleo vegetable	0	0	0
Pork fat	0?	0	0
Tallow	0	0	0
Veg. oils	0?	0	0

MISCELLANEOUS ITEMS

	A	B	C
Alfalfa	xxx	xxx	?
Clover	xxx	xxxx	?
Honey	....	xx	0
Malt extract	0	0	0
Timothy	xx	xxx	....
Yeast brewers	0	xxxx	0
Yeast cake	0	xx	0
Yeast extracts	0	xxx	0

The Vitamins are necessary to sustain life and are found in foods as given in the table.

They probably are the vital or life elements in raw foods and are either entirely destroyed or greatly weakened by the heat of cooking.

Vitamin "A" disappears at a temperature of about 240° F.; Vitamin "B" at 220° F., and Vitamin "C" at 120° F., in ordinary cooking.

In vacuum or steam pressure cooking in the absence of oxygen, the Vitamins apparently are more resistant to heat and seem not to be entirely destroyed.

We are always sure of a plentiful supply of Vitamins in uncooked fruits, salads, raw vegetables and natural milk.

Lus. A M. 152. Jan. 10

General Menus for Good Health

Taken from How to Live and Eat for Health by Dr. P. L. Clark.

The menus are here given in two ways. In the first group they are arranged by days with suggestions for breakfast, dinner and supper.

In the second arrangement all the breakfasts, all the lunches, and all the dinners are grouped together.

Ordinarily, I believe it better to eat dinner, or the heartiest meal of the day, in the evening, but this can be altered to suit individual preference or convenience.

Proteins are the tissue re-building elements, and since the re-building of worn out tissues is carried on most extensively while at rest, I believe it better to eat protein for the evening meal.

The second arrangement has been made with great care so that when choosing even at random, no seriously wrong combinations can be eaten.

MONDAY

Breakfast

Wholewheat Muffins
Butter, honey or Maple Syrup
Glass of Milk

Luncheon

Salad
Quarter of Raisin Pie
Peas

Dinner

Roast Lamb
Salad Garnished with Fresh Mint Leaves
Peas and Carrots, Spinach
Sliced Orange

TUESDAY

Breakfast

Steamed Figs, Apple
Glass of Milk

Luncheon

Salad
Wholewheat, Onion or Lettuce Sandwiches
Glass of Milk

Dinner

Salad
Pork Chops, Apple Sauce
Carrots, Asparagus
Grapefruit

WEDNESDAY

Breakfast

Ry-Krisps with Butter
Buttermilk

Luncheon

Salad
Ice Cream
Cake

Dinner

Spinach Soup
Roast Beef
Cauliflower, Beets
Salad
Fresh Fruit

THURSDAY

Breakfast

Fresh Fruit
One Pint Buttermilk or Sweet Milk

Luncheon

Salad
Baked Sweet Potatoes
String Beans

Dinner

Salad
Scrambled Eggs, Bacon
Spinach, Cabbage
Custard Pie

FRIDAY

Breakfast

Melon

Luncheon

Salad
Natural Brown Rice
Steamed Dates
Glass of Milk

Dinner

Steak
Celery, Olives
Brussels Sprouts, Parsnips
Gelatin

SATURDAY

Breakfast

Whole Cornbread and Butter
Glass of Milk

Luncheon

Salad
Cottage Cheese
Dates or Figs
Fresh Fruit

Dinner

Salad
Meat Loaf
Corn, Salsify
Sweet Dried Fruit

SUNDAY

Breakfast

Baked Apples
Sweet Dried Fruit

Luncheon

Salad
Baked Bananas
Milk

Dinner

Salad
Chicken
Tomatoes, Stewed Egg Plant
Pineapple

MONDAY

Breakfast

Wholewheat Waffles, Butter
Honey or Maple Syrup
Bacon

Luncheon

Salad
Baked Apples
One Pint of Milk

Dinner

Roast Pork
Fruit Salad of Apples, Grapes and Orange
Chard, String Beans
Apple Sauce

TUESDAY

Breakfast

Fresh Fruit, Sweet Dried Fruit
Glass of Milk

Luncheon

Salad
Baked Hubbard Squash
Sweet Dried Fruit

Dinner

Creamed Shrimp
(Creamed with Evaporated Milk or Cream)
Salad of Lettuce, Grapefruit and Raisins
Tomatoes, Green Lima Beans

WEDNESDAY

Breakfast

Toasted Triscuit
Sweet Dried Fruit

Luncheon

Salad
One Pint of Sweet Milk
Baked Apple

Dinner

Celery Soup
Salad
Game of Any Kind
Stewed Onions, Corn

THURSDAY

Breakfast

Whole Oatmeal, Served with Butter
Glass of Milk

Luncheon

Salad
Baked Irish Potato
Sweet Dried Fruit

Dinner

Salad
A boiled Dinner of Beef
Carrots, Onions, Turnips

FRIDAY

Breakfast

Wholewheat Bread, Butter
Sweet Dried Fruit

Luncheon

Salad
10 to 15 Pecans
Glass of Milk

Dinner

Celery
Grapefruit
Tomatoes, Spinach
Baked Fish

SATURDAY

Breakfast

Cornmeal Mush
Served Hot with Butter
Glass of Milk

Luncheon

Salad
Dish of Berries with Whipped Cream
Glass of Milk

Dinner

Tomato Soup
Salad
Roast Beef
Okra and Tomato, Onions
Prunes

SUNDAY

Breakfast

Hot Muffins
Honey or Maple Syrup
Glass of Milk

Luncheon

Salad
Spinach Pudding with Whipped Cream
Figs Steamed or Soaked

Dinner

Vegetable Soup
Salad with Orange Juice Dressing
Summer Squash, String Beans
Roast Fowl
Jelly
Ice Cream

BREAKFASTS

No. 1

Fresh Fruit
One Pint of Buttermilk or Sweet Milk

No. 2

Cantaloupe
or Watermelon

No. 3

Baked Apple with Cream
Sweet Dried Fruits

No. 4

Glass of Milk
Some Sweet Dried Fruit
Fresh Fruit

No. 5

Baked Apple
One Pint of Milk

No. 6

Apple Sauce

No. 7

One Pint of Milk
Cottage Cheese
Fresh Fruit
A Few Dates or Figs

No. 8

American or Swiss Cheese
Fresh or Preserved Fruit

No. 9

One Handful of Nut Meats
Sweet Dried Fruit

No. 10

Toasted Triscuit
Sweet Dried Fruit

No. 11

Whole Oatmeal Dressed with
Butter
Glass of Milk

No. 12

Toasted Ry-Krisp
Butter
Glass of Milk

No. 13

Wholewheat Zweibach
Butter
Sweet Dried Fruit

No. 14

Wholewheat or Corn Muffins
Butter, Honey or Maple Syrup
Glass of Milk

LUNCHEONS

No. 1

Lettuce
Spinach Pudding
Soaked Figs

No. 2

Salad
Natural Brown Rice
Steamed Dates
Glass of Milk

No. 3

Salad
Whole Cornbread
Butter
Glass of Milk

No. 4

Celery
Baked Bananas
Milk

No. 5

Salad
Waffles, Butter
Honey or Maple Syrup
Bacon

No. 6

Salad
Baked Hubbard Squash
Sweet Dried Fruit

No. 7

Salad
One Pint of Sweet Milk
Baked Apple

No. 8

Celery
Baked Irish Potatoes
or Sweet Potatoes
Sweet Dried Fruit

No. 9

Lettuce
Whole Cornmeal Mush Fried
Butter
Glass of Milk

No. 10

Cold Slaw
Wholewheat Gems
Butter
Glass of Milk

No. 11

Salad
Ice Cream
Cake

No. 12

Salad
Raisin Pie
Glass of Milk

No. 13

Celery
Lettuce and Onion Sandwich
on Wholewheat Bread
Glass of Milk

No. 14

Salad
Date Pudding with Whipped Cream
Glass of Milk
Salad

No. 15

Berries and Cream
Glass of Milk

DINNERS

No. 1

Salad
Tomatoes, Stewed Egg Plant
Chicken
Pineapple

No. 2

Fruit Salad of Apples, Grapes and Oranges
Chard, String Beans
Roast Pork

No. 3

Salad of Lettuce, Grapefruit and Raisins
Tomatoes, Brussels Sprouts
Creamed Shrimp
(Creamed with Evaporated Milk or Cream)

No. 4

Celery Soup
Salad
Stewed Onions, Corn
Game of Any Kind
Apple Sauce

No. 5

Salad
Boiled Dinner
(Beef, Carrots, Onions, Turnips, Parsnips)
Fresh or Canned Fruits

No. 6

Celery
Tomatoes, Spinach
Baked Fish
Grapefruit

No. 7

Salad
Tomato Soup
Okra and Tomatoes, Onions
Roast Beef
Prunes

No. 8

Spinach Soup
Lettuce
Veal Stewed with Carrots, Parsnips, Tomatoes
Baked Apples
Salad with Orange Juice Dressing

No. 9

Vegetable Soup
Summer Squash, String Beans
Roast Fowl, Jelly
Ice Cream

No. 10

Salad
Spinach, Cabbage
Scrambled Eggs, Bacon
Custard Pie

No. 11

Salad
Brussels Sprouts, Parsnips
Steak
Gelatin and Cream

No. 12

Salad Garnished with Fresh Mint Leaves
Peas and Carrots, Spinach
Roast Lamb
Sliced Oranges

No. 13

Salad
Carrots, Asparagus
Pork Chops, Apple Sauce
Grapefruit

No. 14

Spinach Soup
Salad
Cauliflower, Beets
Roast Beef
Fresh Fruit

Breakfasts, numbers 1 to 6 inclusive, are neutral and can be followed by a lunch and dinner of either starch or protein. These should be eaten in warm weather.

From 7 to 9 inclusive, are some suggestions for a protein breakfast if it is desired. These may be eaten by people doing strenuous physical labor.

From 10 to 14 inclusive, starch breakfasts are given. These should be eaten in cold weather, and for those doing very strenuous physical labor might be eaten alternately with the protein breakfasts.

All the luncheons suggested are starch meals and all the dinners protein meals. If a hearty meal is desired, add one or two non-starchy vegetables to any of the luncheons suggested. Then make the dinner for the same day correspondingly light.

For a man doing heavy manual labor, the following menu for one day is suggested as an indication of how the quantities in any of the other menus may be enlarged:

For breakfast, eat some starch dry with butter; with this you may have eight or ten pieces of sweet fruit. What I mean by sweet fruits are prunes, raisins, black Mission figs and dates. The dates do not need to be cooked, neither do any of the fruits, for that matter, as they may be soaked for twenty-four hours and eaten in that condition; or you may stew the first three if you prefer, after they have been soaked. Then drink two or three glasses of milk.

At noon, have a salad, two cooked non-starchy vegetables, starch, milk and a dessert of sweet fruit.

For your supper at night, have again a large salad—a good big soup plate full. You may dress this salad with any good table oil, if you like it, a little lemon juice when eaten with a protein meal, and salt. Again two cooked non-starchy vegetables with protein and any kind of cooked fruit, such as jelly, baked apple, or sweet fruit, for dessert.

In all the menus the salads and vegetables are placed early in the meal so that plenty of them will be taken and thus lessen the temptation to overeat on the protein or starch part of the meal.

Exercises You Should Take

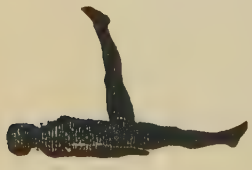
The following exercises to be taken on a bed are planned for a fairly hard bed. In case you have a very soft bed, with deep, soft mattress, the first exercises, to be taken reclining on the bed, should be done on the floor or on a davenport or couch that is fairly hard. If the bed is too soft the exercises will lose much of their value. None of these exercises should be indulged in too often, especially at first. Don't overexert. Don't tire yourself out. Exercise in moderation.

For the movements to really do you some good they should always be taken with tensed muscles when so indicated. You will be surprised at the results you will obtain from following these exercises regularly every morning. It is best to exercise before bathing. Then the bath removes the impurities of the body discharged by the perspiration caused by the exercises. Perseverance is the great secret of weight control. It is necessary to do things **regularly**, not by fits and starts. If you can't find time to exercise on arising, plan to do it later, but set a definite time and observe it every day. The regularity is most essential. Drink good, pure water before and after exercising if you are thirsty. These exercises are planned to aid digestion, assimilation of food and to prevent constipation. They will help keep your bowels regular and open at all times. Don't exercise after a heavy meal.

EXERCISE NO. 1. First stretch thoroughly. You have noticed how a cat stretches. Distend the arms over the head, then sideways, inflating the chest and stretching to the furthest limit. Stretch the legs, the abdominal region, the neck and head. Now throw off the bed clothing and do the following:

EXERCISE NO. 2. Lie on the back and tense the muscles of both legs at the same time by extending and bending the toes downward as far as possible, making the muscles and the body rigid. Relax and inhale deeply. Exhale, then inhale as you tense the legs again. Repeat this several times.

EXERCISE NO. 3. Tense the muscles of both arms, stretched above your head as for a dive, with the hands tensed and palms up. Make arms and body muscles rigid. Exhale and relax, then take a deep breath and tense the muscles again. Repeat.



EXERCISE NO. 4. Tense the muscles of the legs and slowly lift one leg at a time until it is perpendicular to the body. Keep tension on leg muscles while lifting the leg and in putting it down. Then do the same with the other leg. Do this alternately several times, always keeping the legs and body rigid. Don't bend the body when lifting the leg. Inhale deeply as each leg is lifted and exhale as you lower it. Do this slowly, always keeping a strain on the muscles of leg and body.

EXERCISE NO. 5. Tense the muscles of the arms and body and hold arms out rigidly to each side. Bring arms down to your side, then slowly, always tensing, bring them out from the body and over the head until the hands meet above the head. Then bring them slowly back to your sides, always keeping the arms and body rigidly tensed. Repeat slowly.

EXERCISE NO. 6. Tense the leg and body muscles, pointing the toes downward, then bring both legs together slowly to an upright position until at right angles with the body. Keep muscles tense until at the top. Then relax while you exhale and then inhale again and slowly lower the legs to original position, always keeping the leg and stomach muscles tensed. Repeat this.

EXERCISE NO. 7. Now change your position on the bed so that you are lying crosswise with your head hanging over the edge of the mattress. Tense the neck muscles and lower the head until it is below the edge of the mattress. Keep legs and abdominal muscles tensed while doing this. Slowly lift the head up until you are looking down at your toes with chin on your chest. Then repeat, dropping the head slowly until hanging below the top of the mattress. Keep body and neck tensed while doing this, and repeat.

EXERCISE NO. 8. Place a pillow, folded, under the hips so as to elevate them. Extend the legs upward and make the alternate movements of a bicycle rider pedaling. Keep a strain on the stomach muscles while doing this.

EXERCISE NO. 9. With the pillow still under your hips, extend the legs in the air and tense the muscles. Then cross the legs in a "scissors" motion. Cross the legs several times from side to side across the body, alternating first the left in front, then the right in front. Breathe deeply and slowly while doing this.

EXERCISE NO. 10. Now sit on the edge of the bed with feet on the floor and hands on hips. Then twist your body, tensing the muscles all the time, turning first to the right, then to the left, making the movements slowly and inhaling as you turn and exhaling as your body starts back. This exercise must be done very slowly and with the body well tensed. Repeat several times.

EXERCISE NO. 11. From same position, with hands on hips bend body forward until chest rests on your knees, keeping body tense all the time. Then slowly lift body back to erect, always tensed. Repeat this, holding the arms straight over the head and keeping arms and body tensed. This is a great exercise for reducing hips and stomach.

EXERCISE NO. 12. Still sitting on edge of bed with hands on hips, bend the body first to the left, then slowly to the right, always keeping muscles of stomach tensed. This movement must be done slowly.

EXERCISE NO. 13. Still sitting on the edge of the bed, clench the hands and hold arms out at full length straight out from your sides until they are in a line with your chest. Tense the muscles of arms and body, then slowly revolve the body from side to side, exerting a strong effort in so doing. Repeat several times. Keep arms tensed.

EXERCISE NO. 14. Now stand up. Place hands on hips, throw out chest and lift one foot at a time until it is at right angles to the body. Keep leg and body muscles tensed while doing this. Alternate first left then right leg, doing this slowly. Point the toes as you lift the feet, keeping a strain on foot muscles. Repeat.

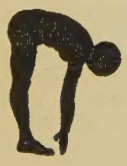
EXERCISE NO. 15. Stand with heels together and feet forming an angle of 90 degrees, hands on hips, head with chin held high. Now lift one leg at a time, bending the knee like a horse trotting. When leg is bent up to the top thigh should rest against the abdomen. Alternate first one leg then the other several times, always keeping a muscular strain on leg and body.

EXERCISE NO. 16. With hands on hips, twist body first to right, then to left, turning it from the waist up but not moving the hips. There must be a strain on the lower body in doing this. A splendid exercise for reducing the hips. Repeat several times, keeping the body tense and making the turns slowly and with effort.

EXERCISE NO. 17. From same position bend the upper body to the right and left alternately, keeping the lower body rigid.

EXERCISE NO. 18. From same position hold head and shoulders steady and turn the hips first to one side, then to the other. Repeat, always keeping a strain on body muscles.

EXERCISE NO. 19. From same position rise on the toes and sink to squatting position with knees wide apart. Drop the arms on sinking and lift them over the head on rising. Inhale on rising and exhale on squatting. Keep steady tension on muscles all the time.



EXERCISE NO. 20. With heels together, standing, lift arms high over the head, then bend the body forward at the waist, keeping the legs rigid. Bend until the tips of your fingers touch you. toes without bending your knees. Then slowly go back to upright position. This exercise must be done very slowly and keeping a marked strain on all the muscles of the body.

EXERCISE NO. 21. Lay on the floor on your back, catching your toes under a low bed rail, dresser, chiffonier or some other heavy article of furniture. Then extend arms over your head with hands wide extended. Now without swinging your body lift yourself to a sitting position. The toe hold is to keep your feet down. This must be done slowly and tensely. Then slowly let the body go back to the reclining position. There is no exercise quite so effective in reducing abdominal fat. Don't overdo this exercise at first. Increase number of flexings as you can.

EXERCISE NO. 22. Still keeping your toe hold and bring body halfway to upright sitting position, then slowly turn upper body left and right several times before going back to reclining position.

EXERCISE NO. 23. Kneel down on the floor with your body sitting back on your feet and your hands extended well out before you, elbows on floor. Now slowly, and with effort, bring body forward until chest is resting on forearms and chin touches the floor. Repeat this slowly, backwards and forwards, several times. Keep a tense muscular strain while doing this.

EXERCISE NO. 24. From same position as in Exercise No. 23, drop one shoulder until it rests on your hand, then the other, alternating them slowly.

EXERCISE NO. 25. From standing position, heels together, arms extended over the head, bend your abdomen forward and outward as far as you can without losing your balance. Do this slowly, then bend it back until your body forms an arc. Then repeat the forward bend. When bent forward the body should form an arc with the tips of the hands and the heels as the ends of the arc. Keep a strong muscular strain all over the body while doing this.